

EXISTING OUTER SHELL OF THE EXISTING GRAIN BIN. REFERENCE NOTES ON THE SITE PLAN FOR SCOPE OF WORK ON THE EXISTING GRAIN BIN.

EDGE OF EXISTING CONCRETE SLAB AROUND PERIMETER OF THE EXISTING GRAIN BIN IS TO REMAIN. NO WORK.

EXISTING GRAIN BIN SUPPORTS. AN EFFORT HAS BEEN MADE TO DRAW THESE SUPPORTS IN THE PLAN ROUGHLY WHERE THEY ARE IN REALITY. GC ASSIST BY MEASURING ACTUAL LOCATIONS IN THE FIELD AND COMPARING WITH WHAT IS DRAWN. SHARE THE INFORMATION WITH THE ARCHITECT SO ADJUSTMENTS CAN BE MADE IN THE DRAWINGS, IF NECESSARY, PRIOR TO CONSTRUCTION.

AN EFFORT HAS ALSO BEEN MADE IN THE DESIGN OF THE ADDITION TO LOCATE NEW OPENINGS IN THE EXISTING GRAIN BIN BETWEEN THESE EXISTING SUPPORTS SO AS TO MINIMIZE ANY CUTTING INTO THE EXISTING GRAIN BIN.

EXISTING UNDERSLAB DUCTS & AUGER FROM ORIGINAL GRAIN BIN ARE TO REMAIN W/O DAMAGE TO GREATEST EXTENT POSSIBLE. AN EFFORT HAS BEEN MADE TO LOCATE FOOTINGS AND NEW STRUCTURE THAT WILL MISS THESE FEATURES. IF SOME ADJUSTMENT TO THE STRUCTURAL GRID SYSTEM SHOWN HERE IS NEEDED TO ACCOMMODATE THE EXISTING FEATURES, GC SHALL REQUEST SUCH ADJUSTMENT, IN WRITING, TO THE ARCHITECT.

GC IS EXPECTED TO LAY OUT PROPOSED GRID SYSTEM AND VERIFY IN THE FIELD IF THE NEW STRUCTURE CAN BE ACCOMMODATED WITH LIMITED, IF ANY, DAMAGE TO THE EXISTING FEATURES.

EXISTING EDGE OF CONCRETE & STEEL RAMP STRUCTURES. DO NOT DAMAGE. REFER TO GENERAL NOTES FOR ADDITIONAL INFORMATION.

PLACE CONTROL JOINTS ALONG EDGES OF PARTITIONS AS SHOWN

REFERENCE WALL SECTION FOR PLACEMENT OF EDGE OF SLAB NEAR PERIMETER OF OUTER SHELL OF THE EXISTING GRAIN BIN.

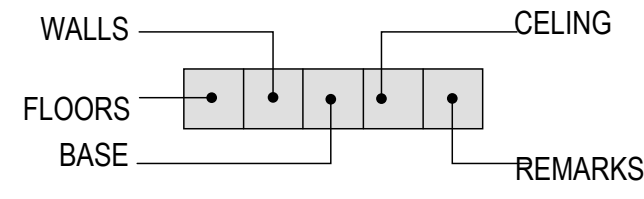
CONTROL JOINTS IN HALL RADIATE FROM THE CENTER OF THE EXISTING GRAIN BIN.

THE PLACEMENT OF THIS DOORWAY IS INTENDED TO BE LOCATED BETWEEN TWO EXISTING SUPPORTS, THUS REQUIRING REMOVAL OF ONLY ONE SUPPORT. GC ASSIST BY LOCATING THESE SUPPORTS IN THE FIELD. ARCHITECT WILL ADJUST THE LOCATION OF THIS DOORWAY, IF NECESSARY, TO MINIMIZE THE STRUCTURAL IMPACT TO THE EXISTING GRAIN BIN.

**I** FOUNDATION COORDINATION PLAN  
SCALE: 1/4" = 1'-0"  
NORTH

**FINISH SCHEDULE LEGEND**

NOTE: NO FINISH WORK IS REQUIRED IN ROOMS NOT SHOWN WITH FINISH SCHEDULE LEGEND



- FLOORS: A: POLISHED CONCRETE  
B: SHEET VINYL, CUSTOM
- WALLS: A: PAINTED GYP. BD.  
B: CURVED, CORRUGATED PANELS  
C: FRP PANELS
- BASE: A: PAINTED WOOD. REFERENCE DETAIL.  
B: 4" RUBBER  
C: NONE
- CEILING: A: PAINTED GYP. BD.  
B: UNDERSIDE OF ROOF PANEL EXPOSED
- REMARKS: A: EPOXY PAINT ON ALL WALLS.  
B: INTERSTITIAL "GAP" SPACES RECEIVE NO FINISH. OTHER THAN GENERAL CLEANING, SURFACES EXPOSED AS-IS.

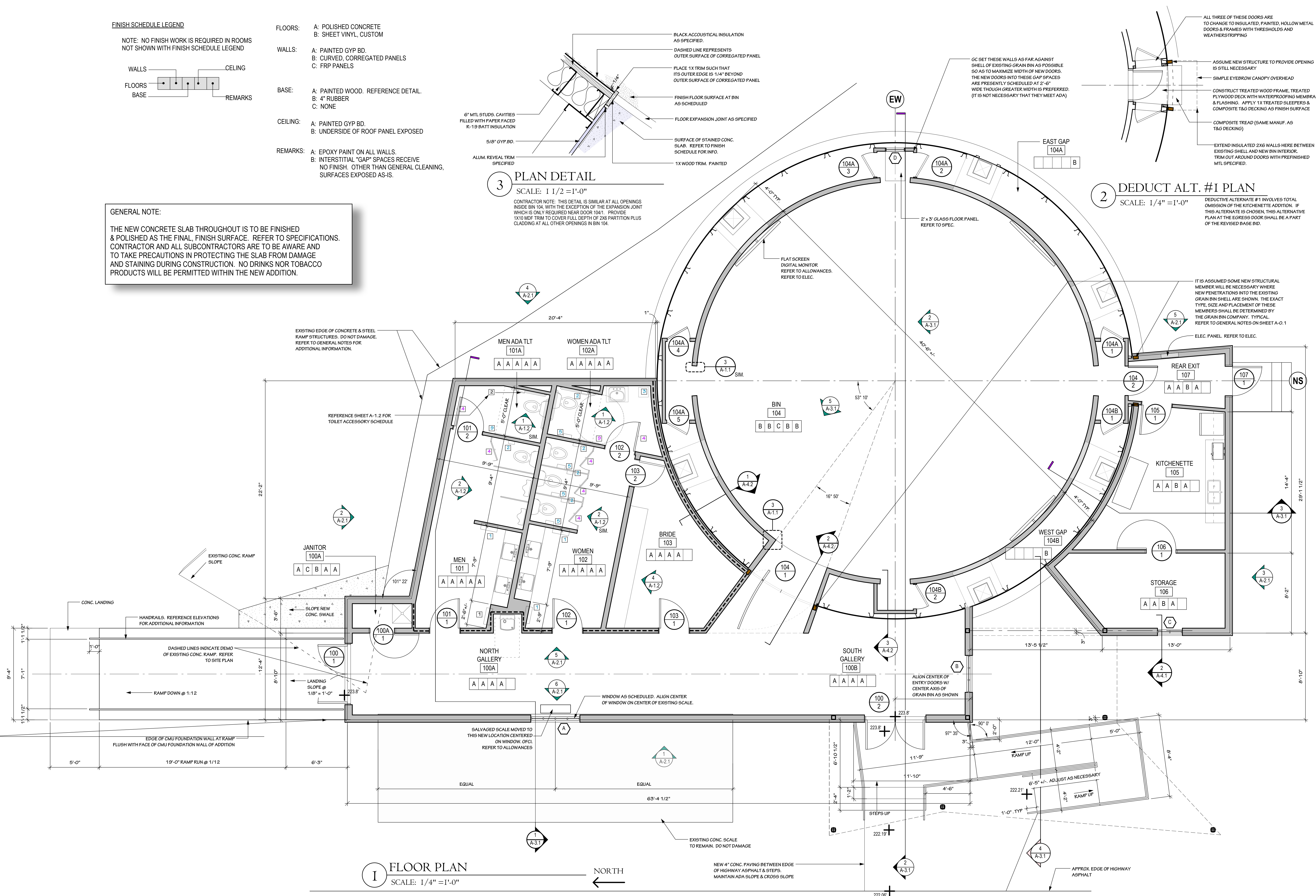
**GENERAL NOTE:**  
THE NEW CONCRETE SLAB THROUGHOUT IS TO BE FINISHED & POLISHED AS THE FINAL, FINISH SURFACE. REFER TO SPECIFICATIONS. CONTRACTOR AND ALL SUBCONTRACTORS ARE TO BE AWARE AND TO TAKE PRECAUTIONS IN PROTECTING THE SLAB FROM DAMAGE AND STAINING DURING CONSTRUCTION. NO DRINKS NOR TOBACCO PRODUCTS WILL BE PERMITTED WITHIN THE NEW ADDITION.

**3 PLAN DETAIL**  
SCALE: 1 1/2" = 1'-0"

CONTRACTOR NOTE: THIS DETAIL IS SIMILAR AT ALL OPENINGS INSIDE BIN 104 WITH THE EXCEPTION OF THE EXPANSION JOINT WHICH IS ONLY REQUIRED NEAR DOOR 104.1. PROVIDE 1X10 MDF TRIM TO COVER FULL DEPTH OF 2X6 PARTITION PLUS CLADDING AT ALL OTHER OPENINGS IN BIN 104.

**2 DEDUCT ALT. #1 PLAN**  
SCALE: 1/4" = 1'-0"

DEDUCTIVE ALTERNATE #1 INVOLVES TOTAL OMISSION OF THE KITCHENETTE ADDITION. IF THIS ALTERNATE IS CHOSEN, THIS ALTERNATIVE PLAN AT THE EGRESS DOOR SHALL BE A PART OF THE REVISED BASE BID.



**1 FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**REVIVAL ARCHITECTURE**  
P.O. Box 400, Scott, AR 72142  
(501) 951-3316 www.revivalarch.com

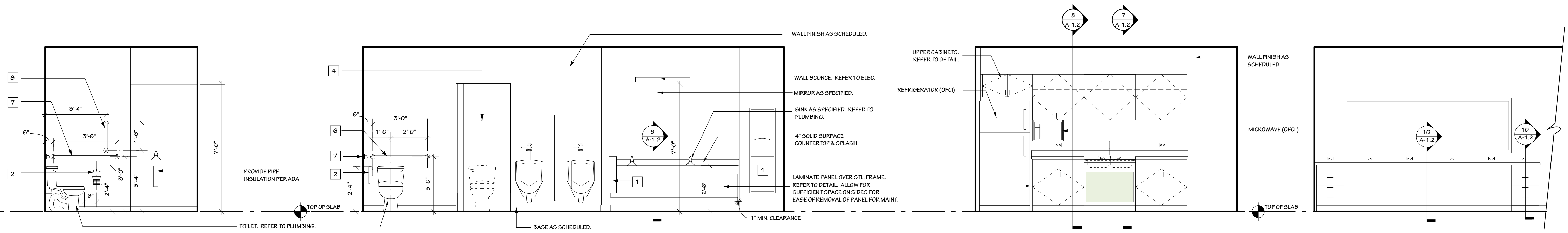
REGISTERED ARCHITECT  
STATE OF ARKANSAS

Project Name: **SOUTHERN TENANT FARMERS UNION MUSEUM GRAIN BIN RESTORATION**  
Sheet Contents: **FLOOR PLAN & FINISH SCHEDULE, DETAILS**

Issue Date: March 1, 2024  
Revisions: RE-BID April 19, 2024

Sheet No: **A-I.1**

TYRONZA, ARKANSAS 72386

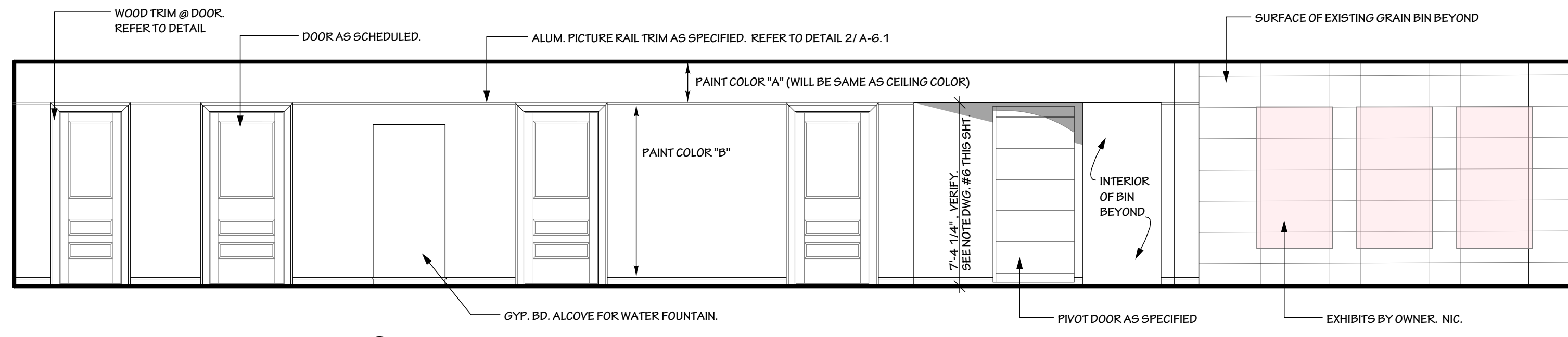


**1 INT. ELEVATION @ WOMEN'S ADA STALL**  
SCALE: 3/8" = 1'-0"  
MEN'S IS SIM. (MINUS SINK)

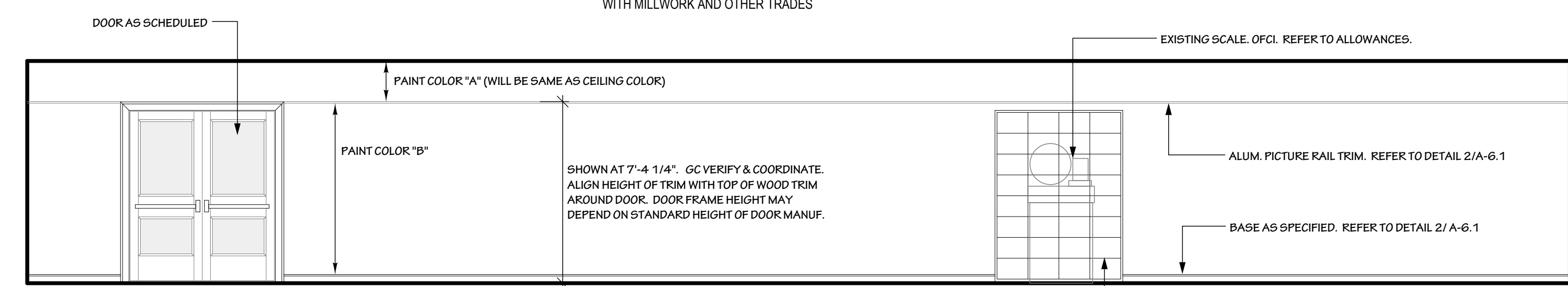
**2 INT. ELEVATION @ MEN'S (WOMEN'S SIM.)**  
SCALE: 3/8" = 1'-0"

**3 INT. ELEVATION @ KITCHENETTE**  
SCALE: 3/8" = 1'-0"  
CONTRACTOR SHALL ASSIST IN VERIFYING NECESSARY CLEARANCES FROM OWNER SELECTED APPLIANCES & COORDINATING WITH MILLWORK AND OTHER TRADES

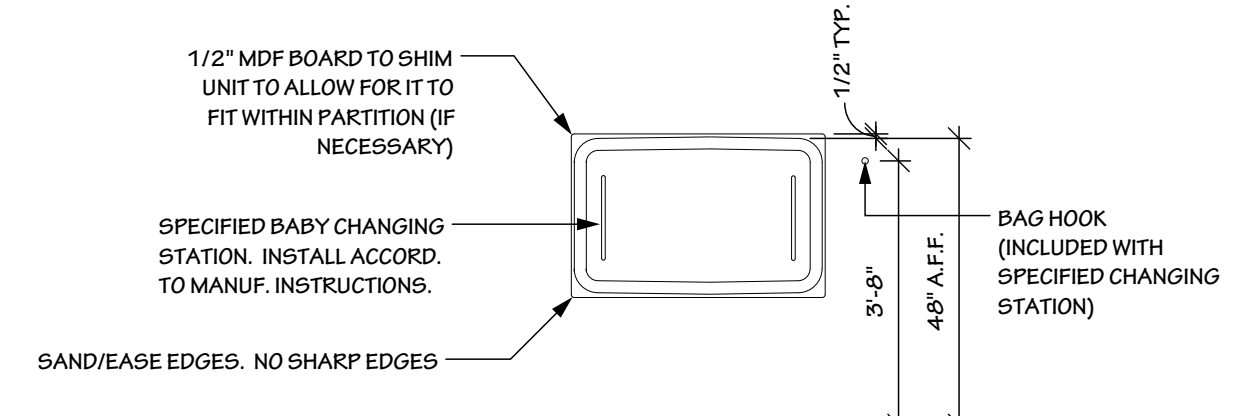
**4 INT. ELEVATION @ BRIDE**  
SCALE: 3/8" = 1'-0"



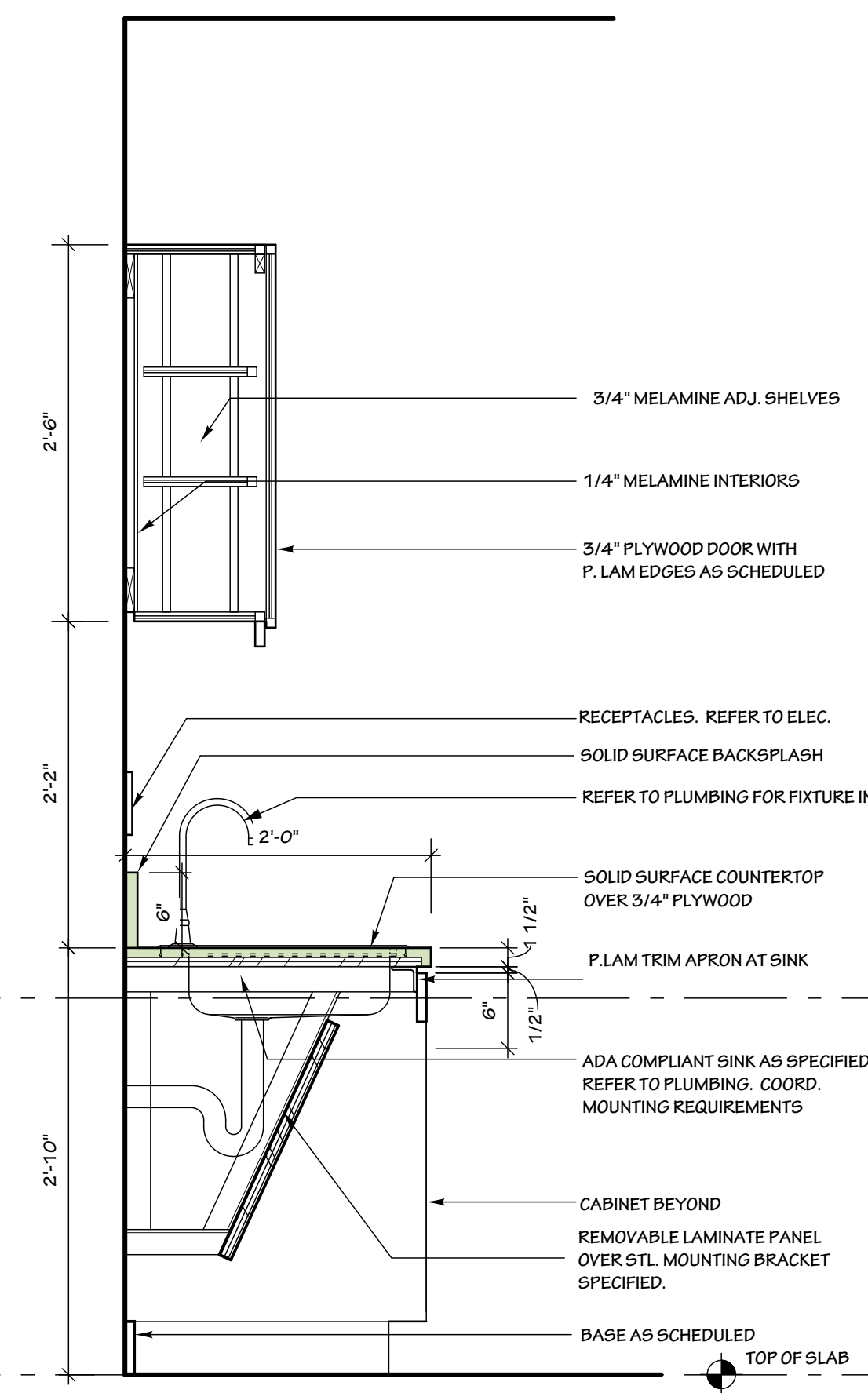
**5 INT. ELEVATION @ GALLERY LOOKING EAST**  
SCALE: 1/4" = 1'-0"



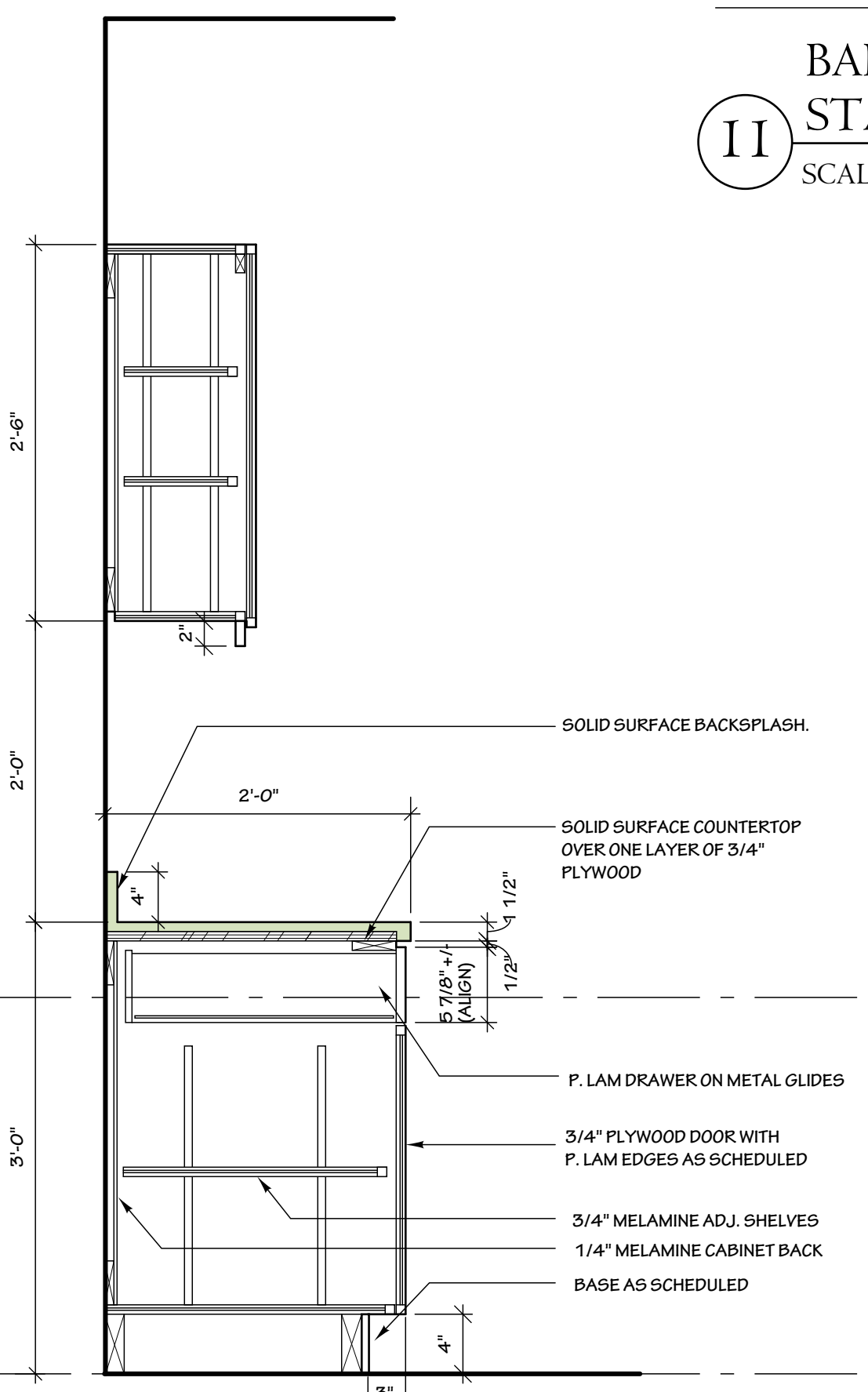
**6 INT. ELEVATION @ GALLERY LOOKING WEST**  
SCALE: 1/4" = 1'-0"



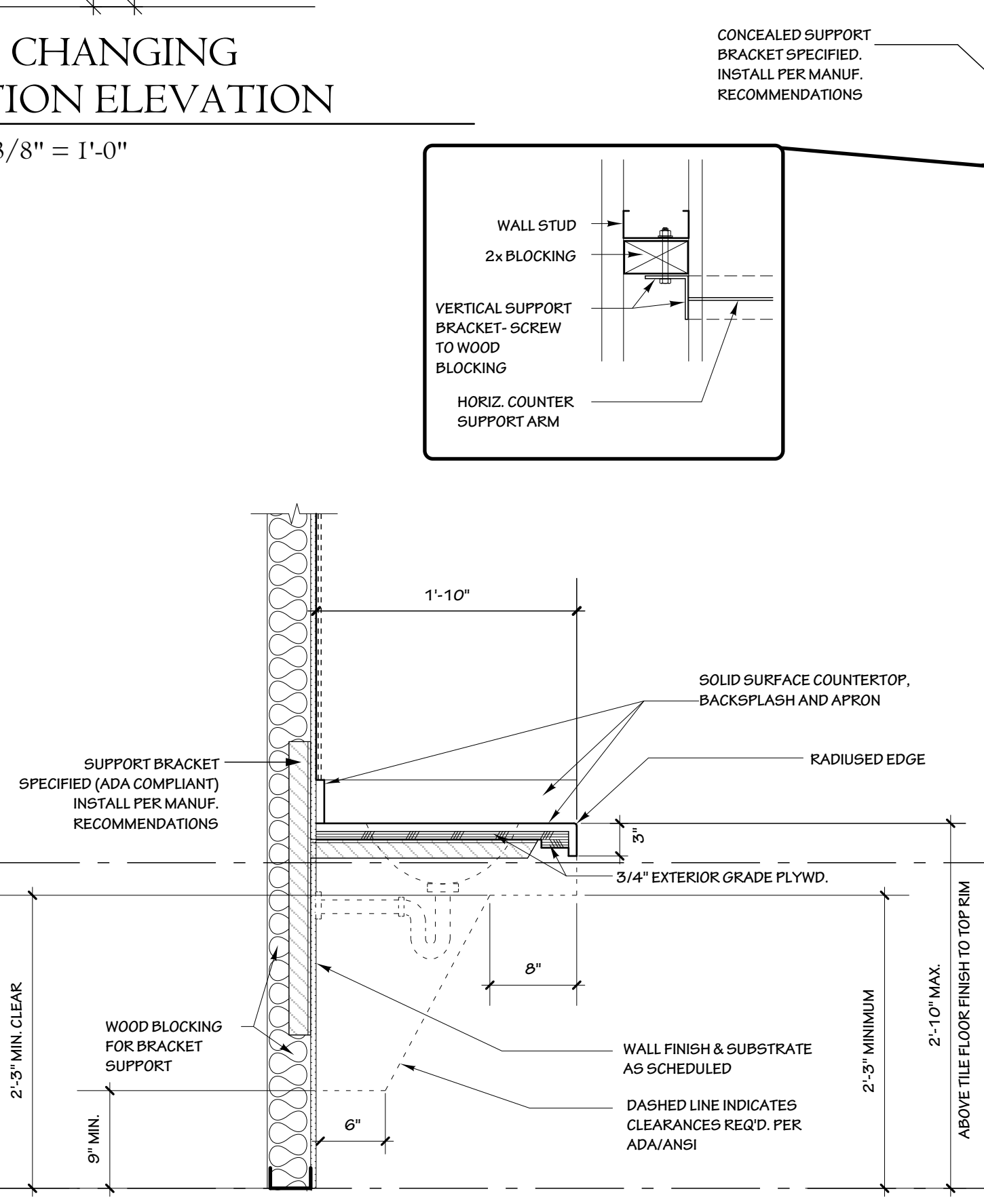
**II BABY CHANGING STATION ELEVATION**  
SCALE: 3/8" = 1'-0"



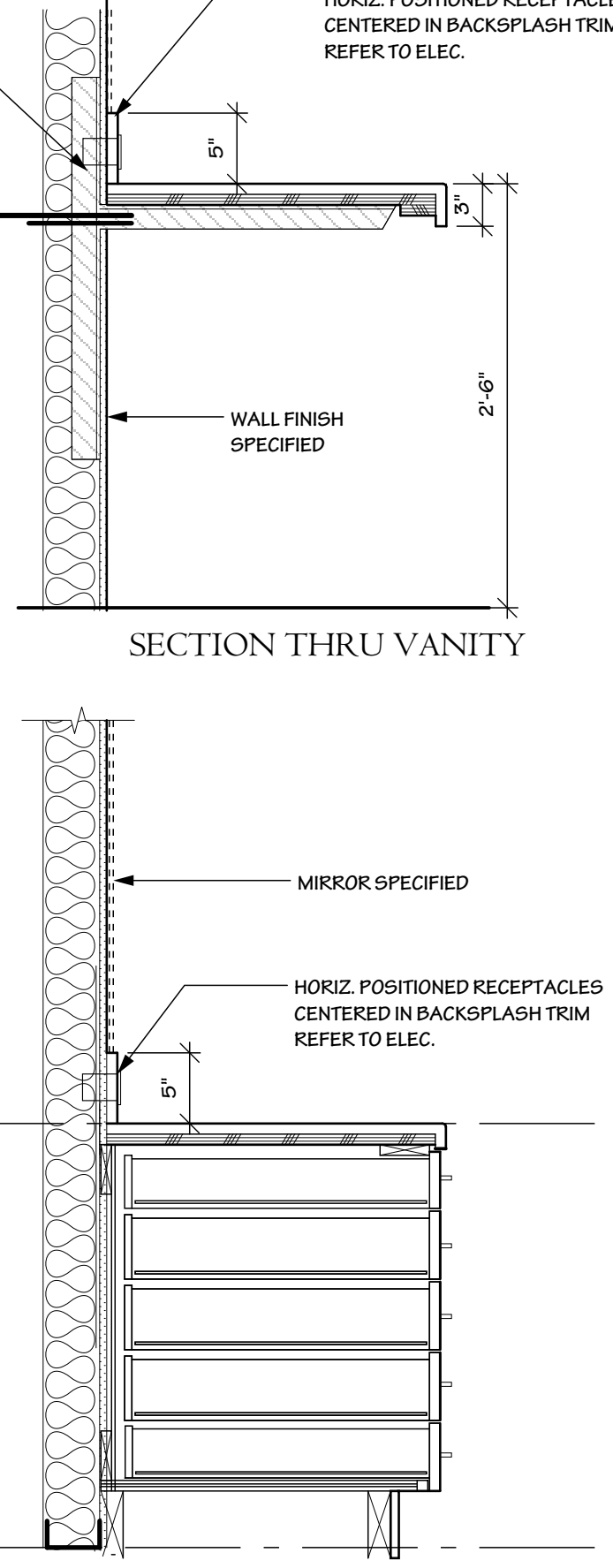
**7 CABINET SECTION**  
SCALE: 1" = 1'-0"



**8 CABINET SECTION**  
SCALE: 1" = 1'-0"



**9 LAVATORY SECTION**  
SCALE: 1" = 1'-0"

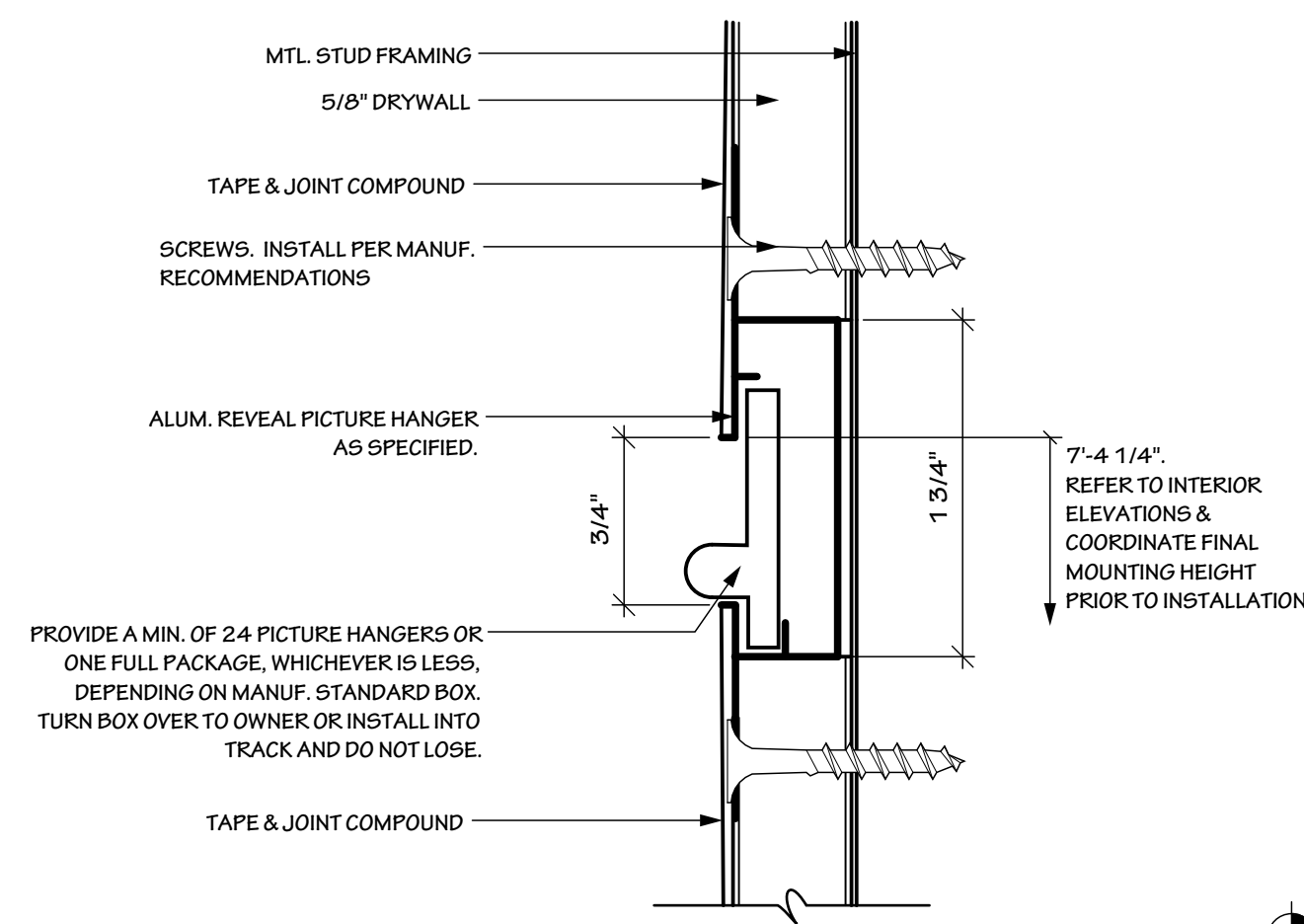


**10 VANITY SECTION**  
SCALE: 1" = 1'-0"

MARK	DESCRIPTION	MODEL #	MOUNT. HGT.
1	RECESSED PAPER TOWEL DISPENSER & WASTE RECEPTACLE	#B-3944	48" MAX. TO DISPENSER
2	SURFACE MOUNTED MULTI-ROLL TOILET TISSUE DISPENSER	#B-2888	28" A.F.F. TO TOP OF UNIT
3	FLOOR-STANDING WASTE RECEPTACLE, OPEN TOP	#B-2260	STORE SAFELY AND SET IN SPACE AT PUNCH LIST BUT NOT BEFORE TO PROTECT FROM DAMAGE.
4	COAT HOOK WITH BUMPER	#B-9541	MOUNT AT BACK OF PARTITION DOOR. 48" A.F.F. IN ADA STALLS. 60" ALL OTHER STALLS.
5	SURFACE MOUNTED NAPKIN DISPOSAL	#B-254	50" A.F.F. TO TOP OF UNIT - SEE PLAN FOR WALL/PARTITION LOCATION
6	STAINLESS STEEL GRAB BAR CONCEALED MOUNT	#6806 x 36	33" A.F.F. TO CENTER OF UNIT. NOTE 2.
7	STAINLESS STEEL GRAB BAR CONCEALED MOUNT	#6806 x 42	33" A.F.F. TO CENTER OF UNIT. NOTE 2.
8	STAINLESS STEEL GRAB BAR CONCEALED MOUNT	#6806 x 18	VERTICAL MOUNT. NOTE 2. 39"-41" A.F.F. TO BOTTOM OF UNIT
9	KOALA HORIZONTAL WALL MOUNTED BABY CHANGING STATION- RECESSED	KB310-55RE (STAINLESS)	48" A.F.F. TO TOP OF UNIT; NOTE 5
10	COUNTER MIRROR- FRAMELESS		CUSTOM SIZE WALL TO WALL. (VERIFY)

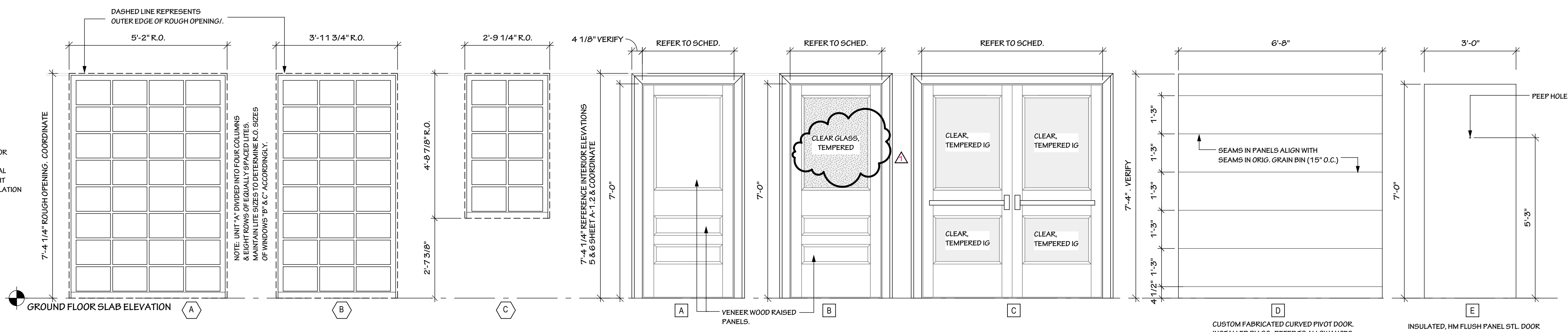
MODEL #'S REFER TO BOBRICK WASH ROOM EQUIPMENT, INC. UNLESS NOTED OTHERWISE  
NOTE: LOCATE TO MEET ADA HEIGHT & CLEARANCE REQUIREMENTS

- NOTE 1: INSTALL 3 1/2" SOUND INSULATION BATTS IN INTERIOR WALLS AROUND MEN'S & WOMEN'S RESTROOMS & ALL NEW WALLS OF ALL RESTROOMS-TYPICAL.
- NOTE 2: PROVIDE/INSTALL BLOCKING FOR GRAB BAR SUPPORT-TYPICAL. ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHERE A VERTICAL OR HORIZONTAL FORCE OF 250 LBS. IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER MOUNTING DEVICE OR SUPPORTING STRUCTURE.
- NOTE 3: PROVIDE BLOCKING WITHIN WALL FOR SUPPORT OF TOILET PARTITIONS & MIRRORS.
- NOTE 4: TOILET STALL DOORS TO BE SELF CLOSING AT ACCESSIBLE STALLS.
- NOTE 5: UNIT IS 4" DEPTH. PROVIDE 1/2" MDF PANEL TO SHIM OUT FIXTURE TO FIT INSIDE WALL. REFER TO DETAIL.



**PICTURE HANGER REVEAL DETAIL**

**1** FULL SCALE



**2 WINDOW SCHEDULE**

SCALE: 1/2" = 1'-0"

**3 DOOR SCHEDULE**

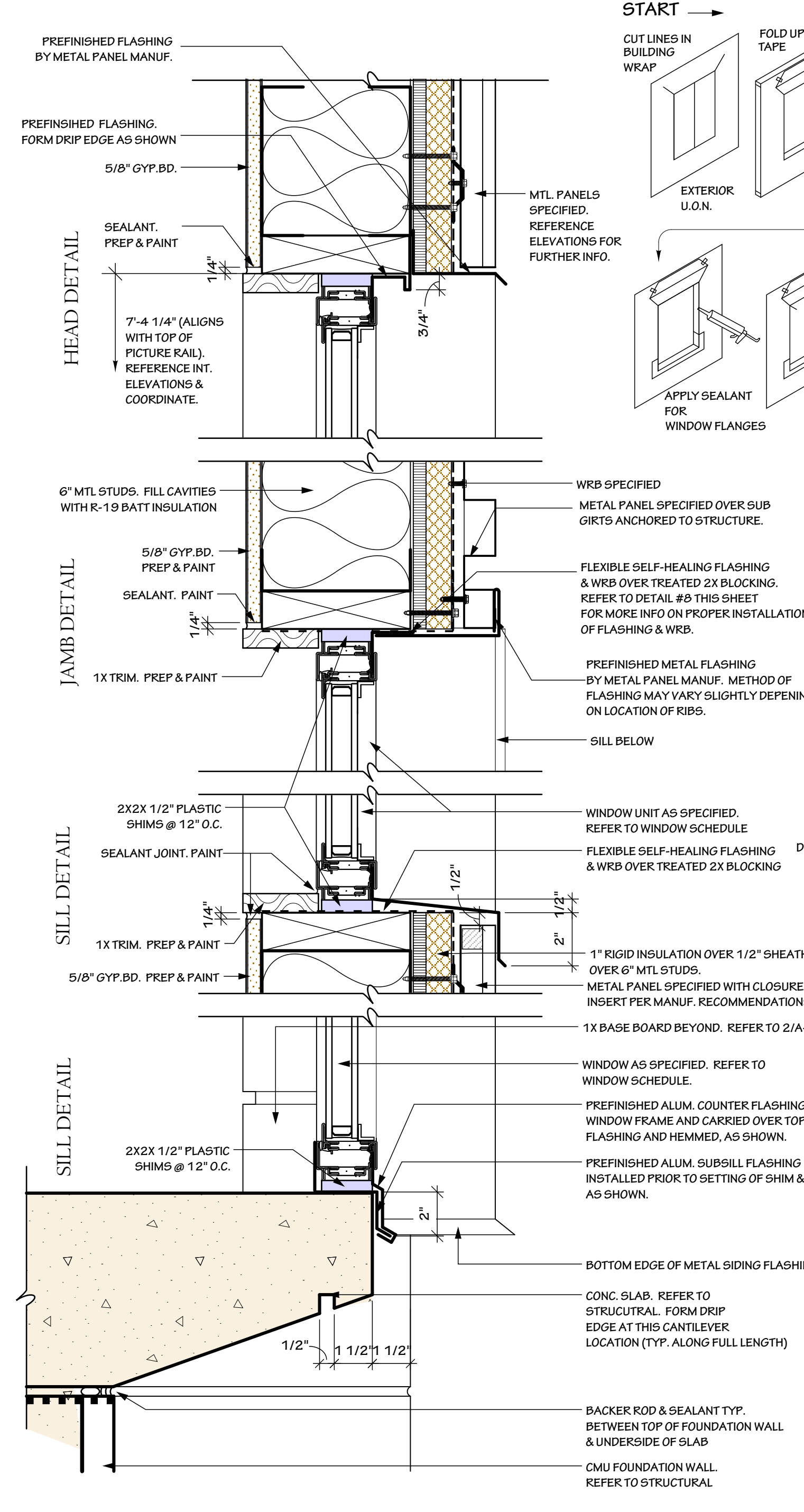
SCALE: 1/2" = 1'-0"

DOOR NUMBER	ROOM	ROOM NUMBER	DOOR KEY	SIZE (WIDTH X HEIGHT)	TYPE	FIRE RATING	FRAME TYPE	HARDWARE
100/2	NORTH GALLERY	100A	C	6'-0" X 7'-0"	ACW	-	ACW	HDW-1
100/2	SOUTH GALLERY	100B	C	6'-0" X 7'-0"	ACW	-	ACW	HDW-1
100A/1	JANITOR	100A	A	3'-0" X 7'-0"	HM	20 MIN	WOOD	HDW-2
101/1	MEN	101	A	3'-0" X 7'-0"	HM	20 MIN	WOOD	HDW-3
101/2	MEN ADA TLT	101A	A	3'-0" X 7'-0"	HM	-	WOOD	HDW-4
102/1	WOMEN	102	A	3'-0" X 7'-0"	HM	20 MIN	WOOD	HDW-3
102/2	WOMEN ADA TLT	102A	A	3'-0" X 7'-0"	HM	-	WOOD	HDW-4
103/1	BRIDE	103	A	3'-0" X 7'-0"	HM	20 MIN	WOOD	HDW-5
103/2	BRIDE	103	A	2'-8" X 7'-0"	HM	-	WOOD	HDW-5
104/1	BIN	104	D	6'-8" X 7'-4"	CUSTOM	REFER TO ALLOWANCES	-	-
104/2	BIN	104	B	3'-0" X 7'-0"	HM	-	WOOD	HDW-6
104A/1	EAST GAP	104A	A	2'-6" X 7'-0"	HM	-	WOOD	HDW-7
104A/2	EAST GAP	104A	A	2'-6" X 7'-0"	HM	-	WOOD	HDW-7
104A/3	EAST GAP	104A	A	2'-6" X 7'-0"	HM	-	WOOD	HDW-7
104A/4	EAST GAP	104A	A	2'-6" X 7'-0"	HM	-	WOOD	HDW-7
104A/5	EAST GAP	104A	A	2'-6" X 7'-0"	HM	-	WOOD	HDW-7
104B/1	WEST GAP	104B	A	2'-6" X 7'-0"	HM	-	WOOD	HDW-7
104B/2	WEST GAP	104B	A	2'-6" X 7'-0"	HM	-	WOOD	HDW-7
105/1	KITCHENETTE	105	B	3'-0" X 7'-0"	HM	-	WOOD	HDW-2
106/1	STORAGE	106	A	3'-0" X 7'-0"	HM	-	WOOD	HDW-2
107/1	REAR EXIT	107	E	3'-0" X 7'-0"	HM	-	HM	HDW-8

**8 TYPICAL WINDOW FLASHING**

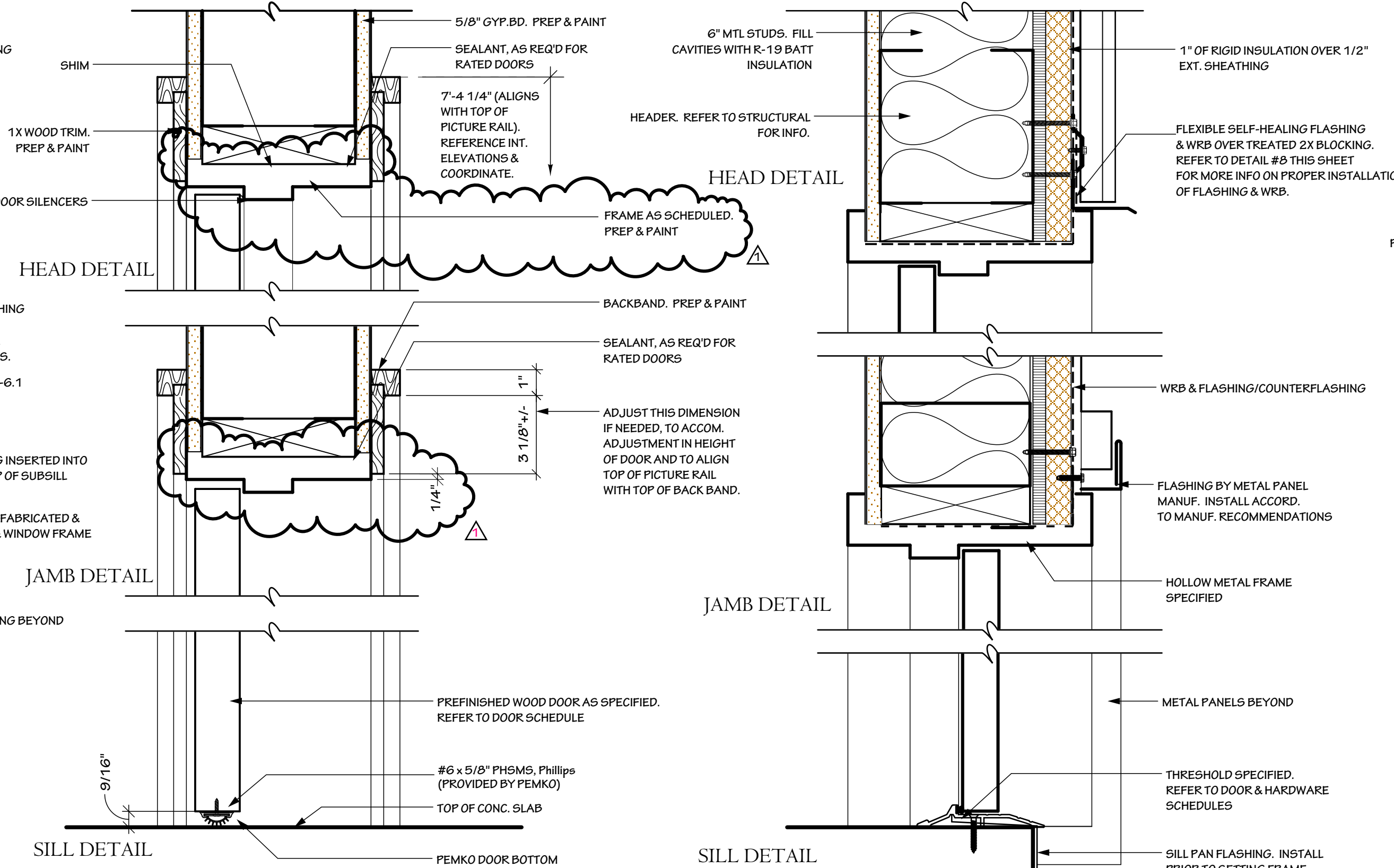
NOT TO SCALE

NOTE: THIS DETAIL IS TYPICAL FOR ALL EXTERIOR WINDOWS. IT SHOWS PROPER MANUF. RECOMMENDED MEANS OF FOLDING IN THE AIR & MOISTURE BARRIER AND FLASHING. BUILDERS SHALL FOLLOW THESE INSTRUCTIONS CAREFULLY. FLASHING NOT DONE PROPERLY WILL BE REJECTED



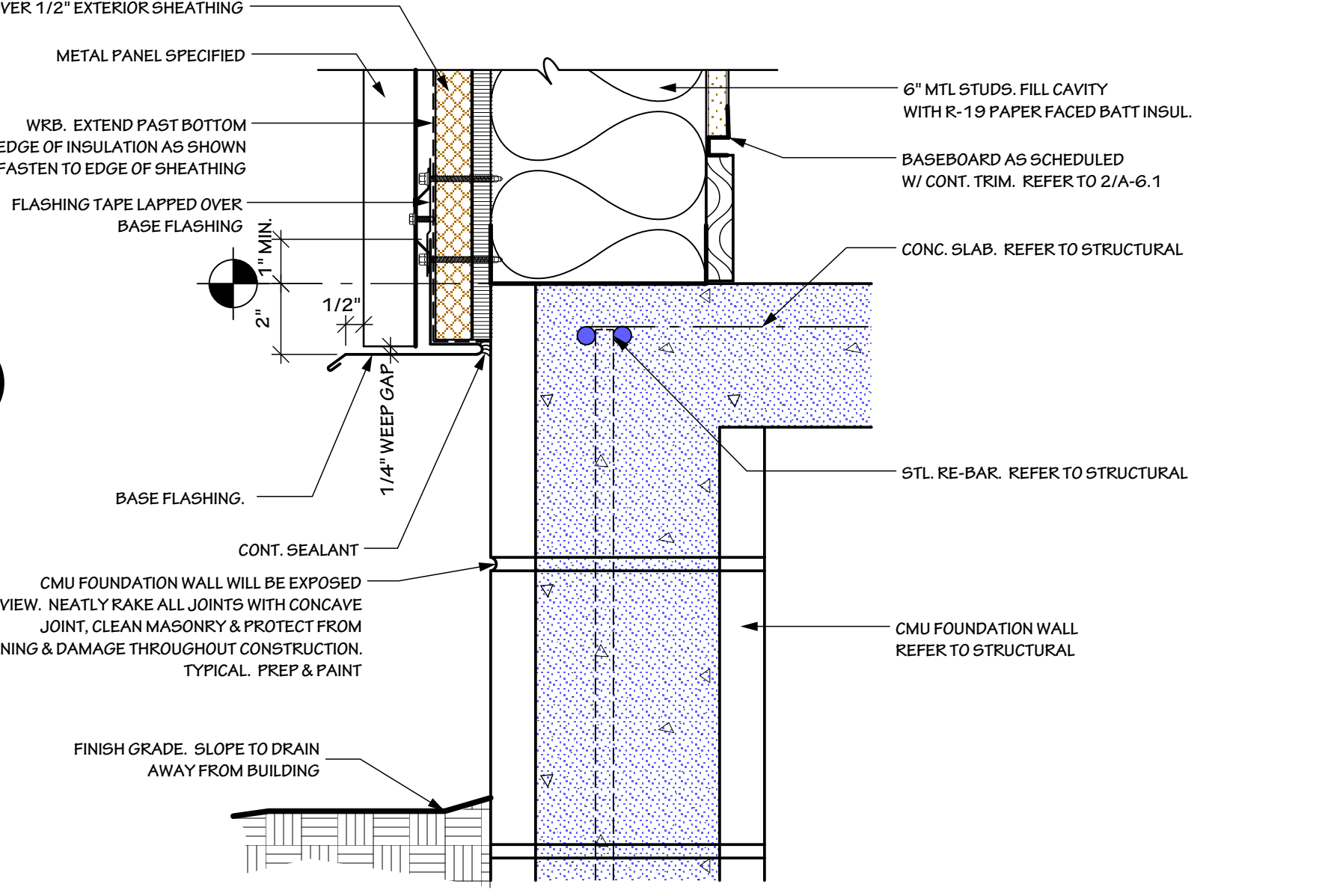
**4 WINDOW DETAILS**

3" = 1'-0"



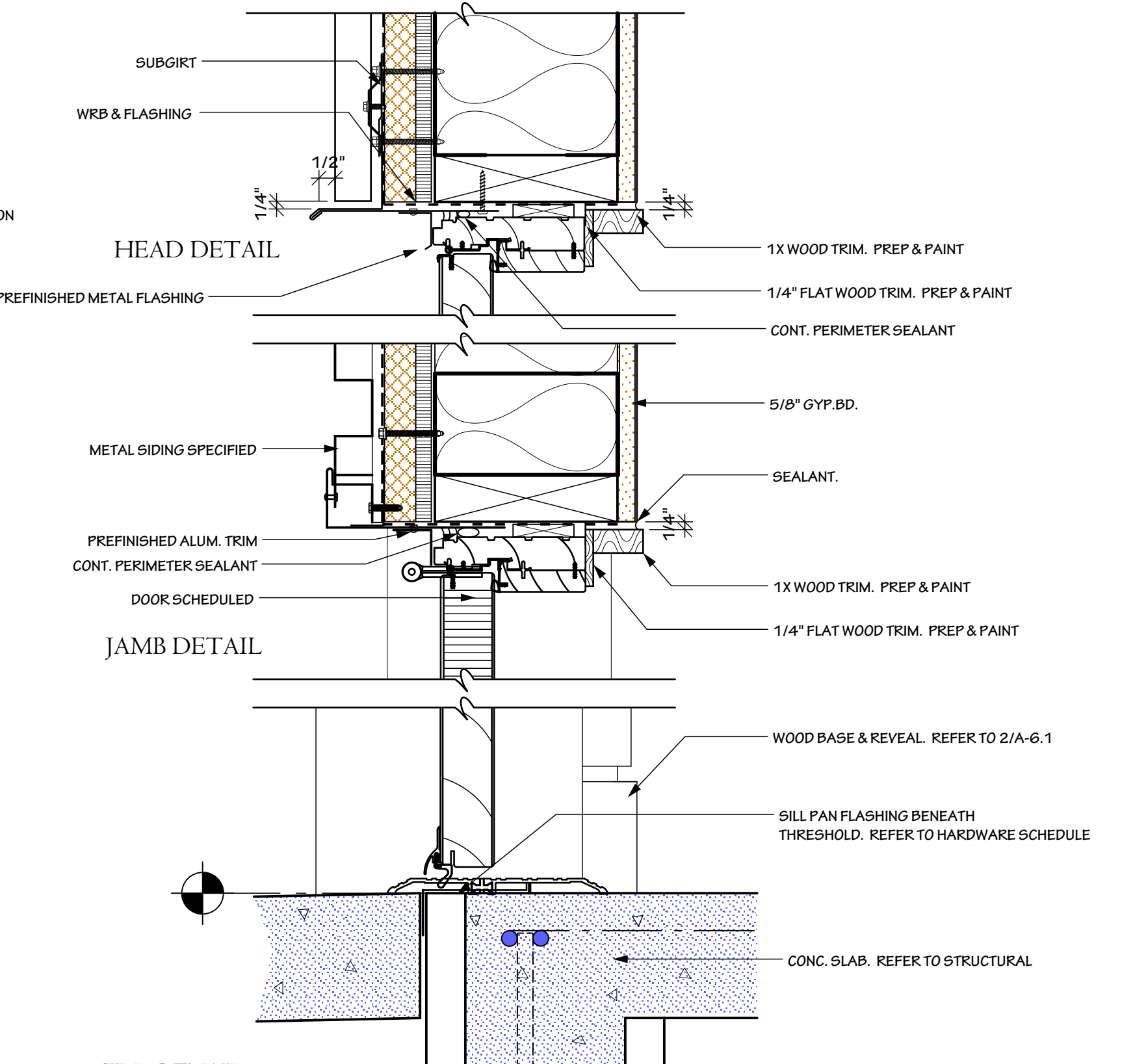
**5 INTERIOR DOOR DETAILS**

3" = 1'-0"



**9 EDGE OF SLAB DETAIL (TYP.)**

SCALE: 3" = 1'-0"

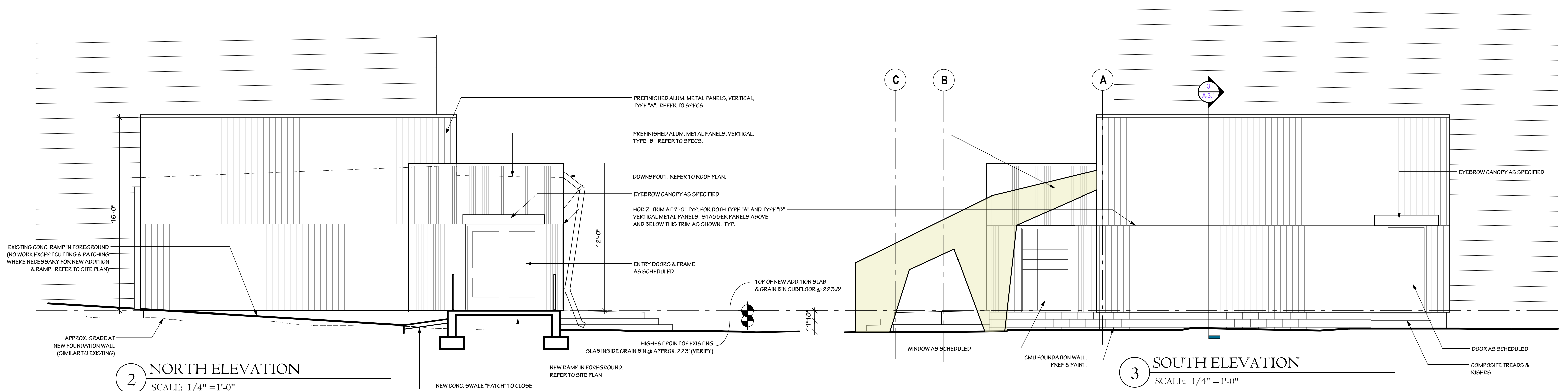


**7 ENTRY DOOR DETAILS**

3" = 1'-0"

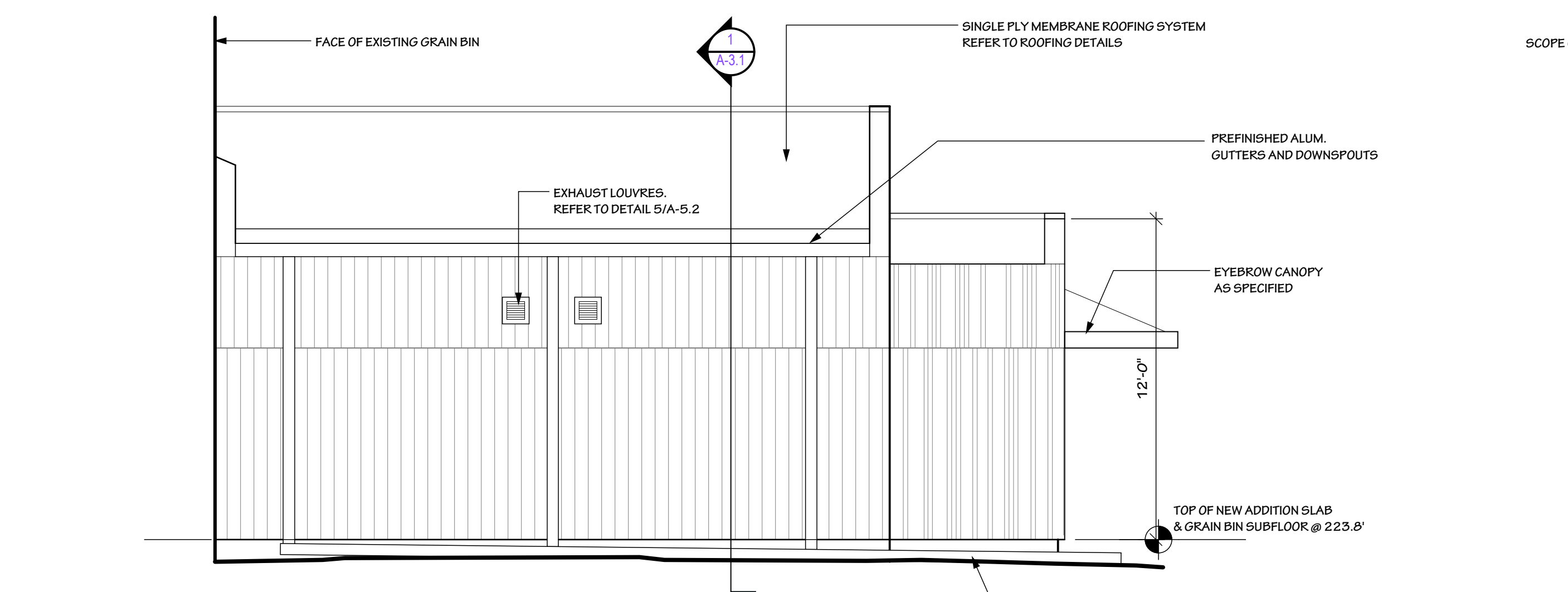
**6 EXTERIOR HM DOOR DETAILS**

3" = 1'-0"

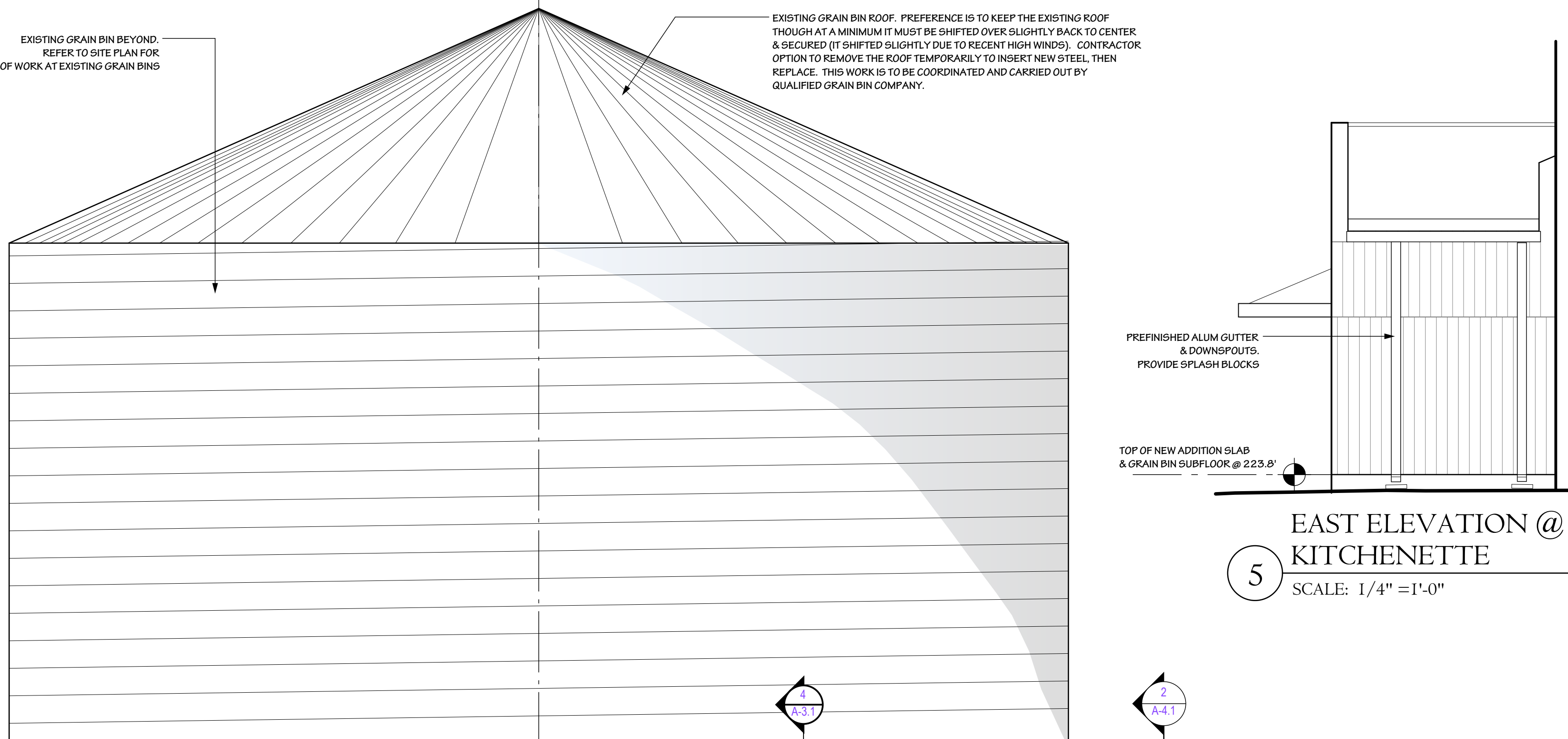


2 NORTH ELEVATION  
SCALE: 1/4" = 1'-0"

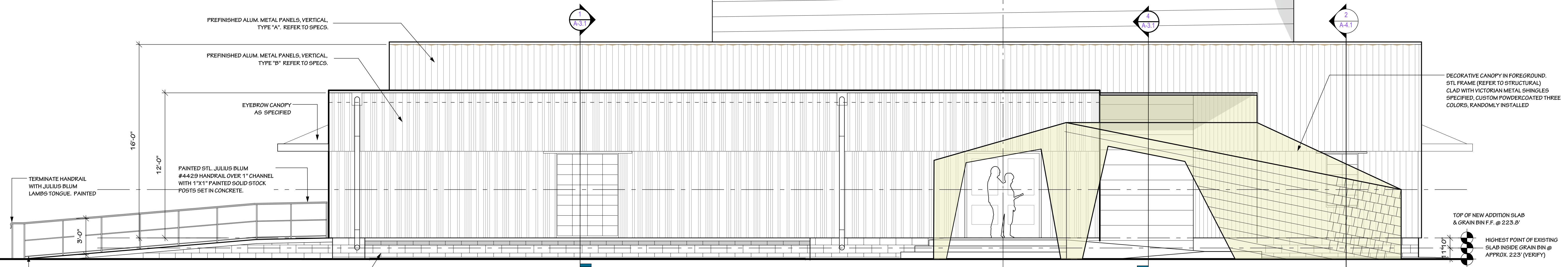
3 SOUTH ELEVATION  
SCALE: 1/4" = 1'-0"



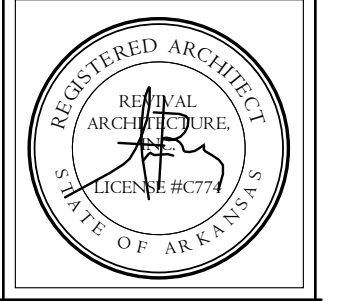
4 EAST ELEVATION @ RESTROOMS  
SCALE: 1/4" = 1'-0"

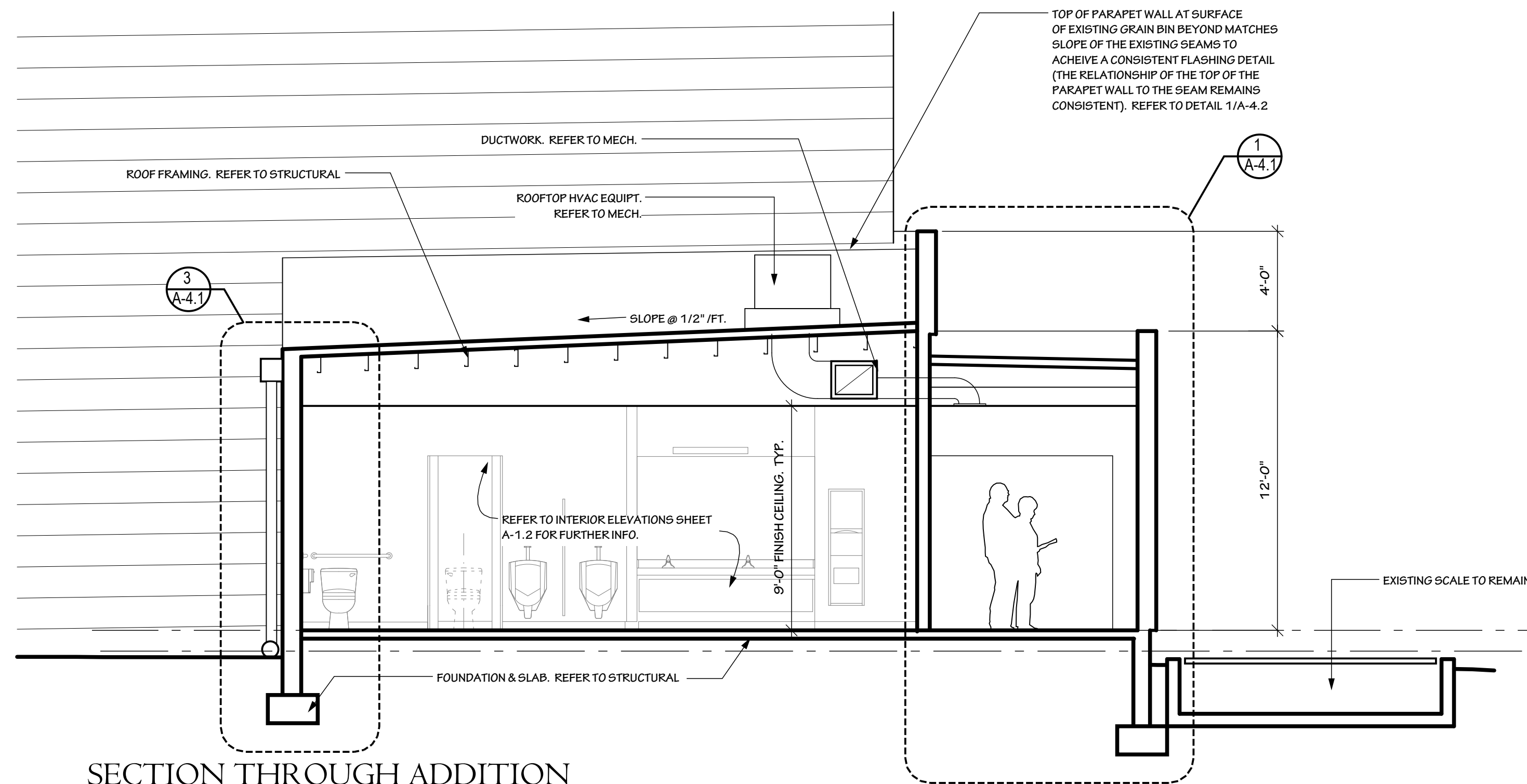


5 EAST ELEVATION @ KITCHENETTE  
SCALE: 1/4" = 1'-0"

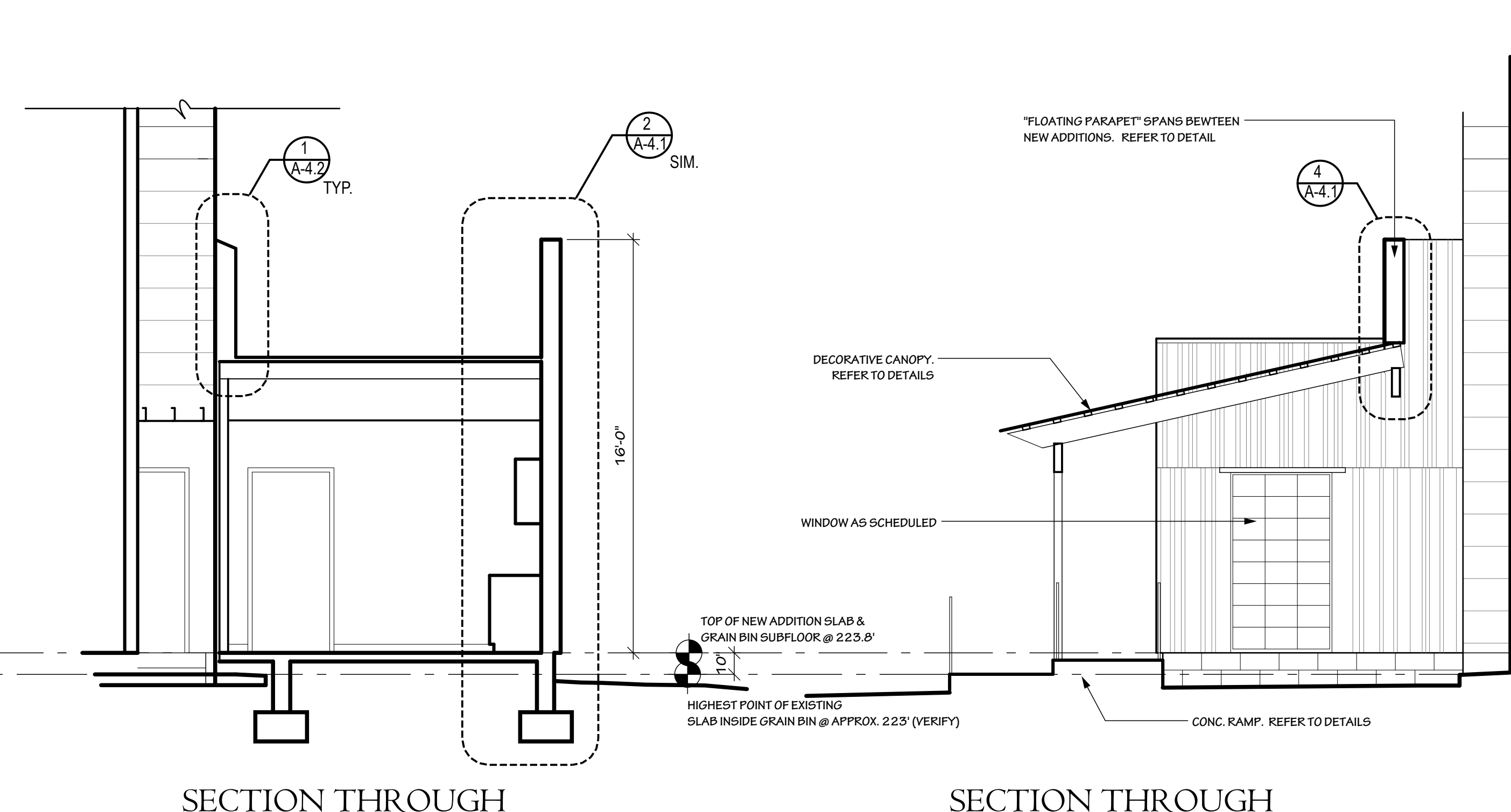


I WEST (FRONT) ELEVATION  
SCALE: 1/4" = 1'-0"

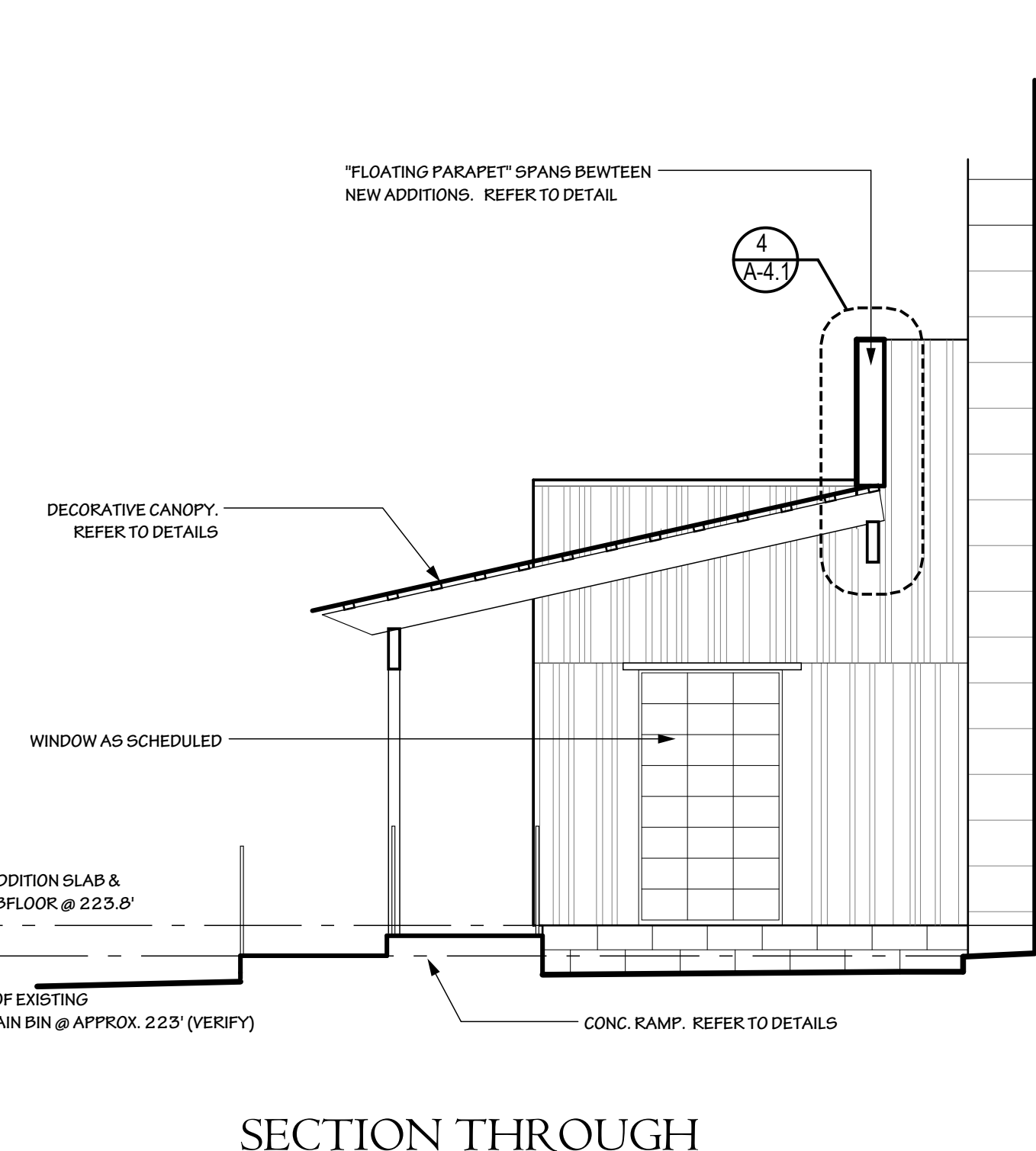




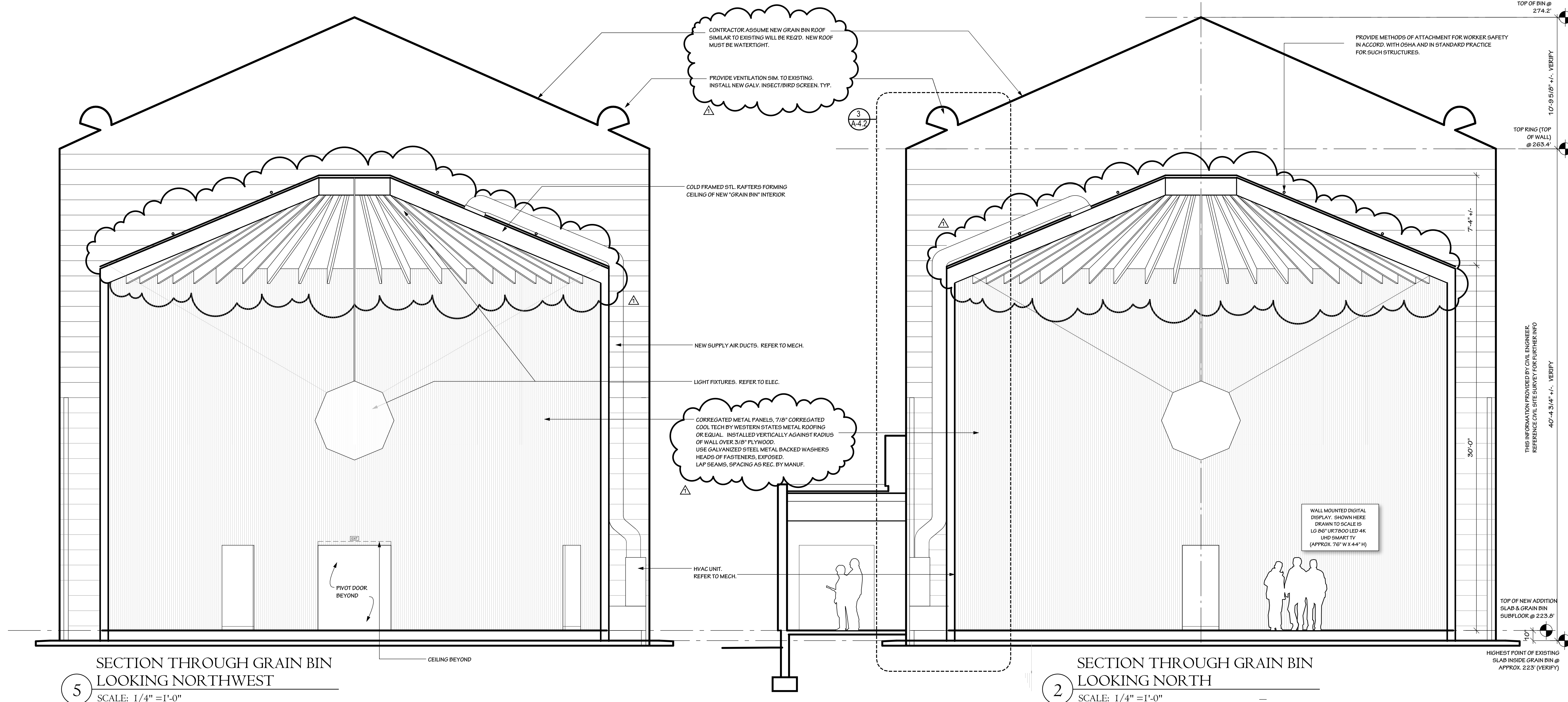
**I** SECTION THROUGH ADDITION  
LOOKING SOUTH  
SCALE: 1/4" = 1'-0"



**3** SECTION THROUGH KITCHENETTE  
LOOKING EAST  
SCALE: 1/4" = 1'-0"

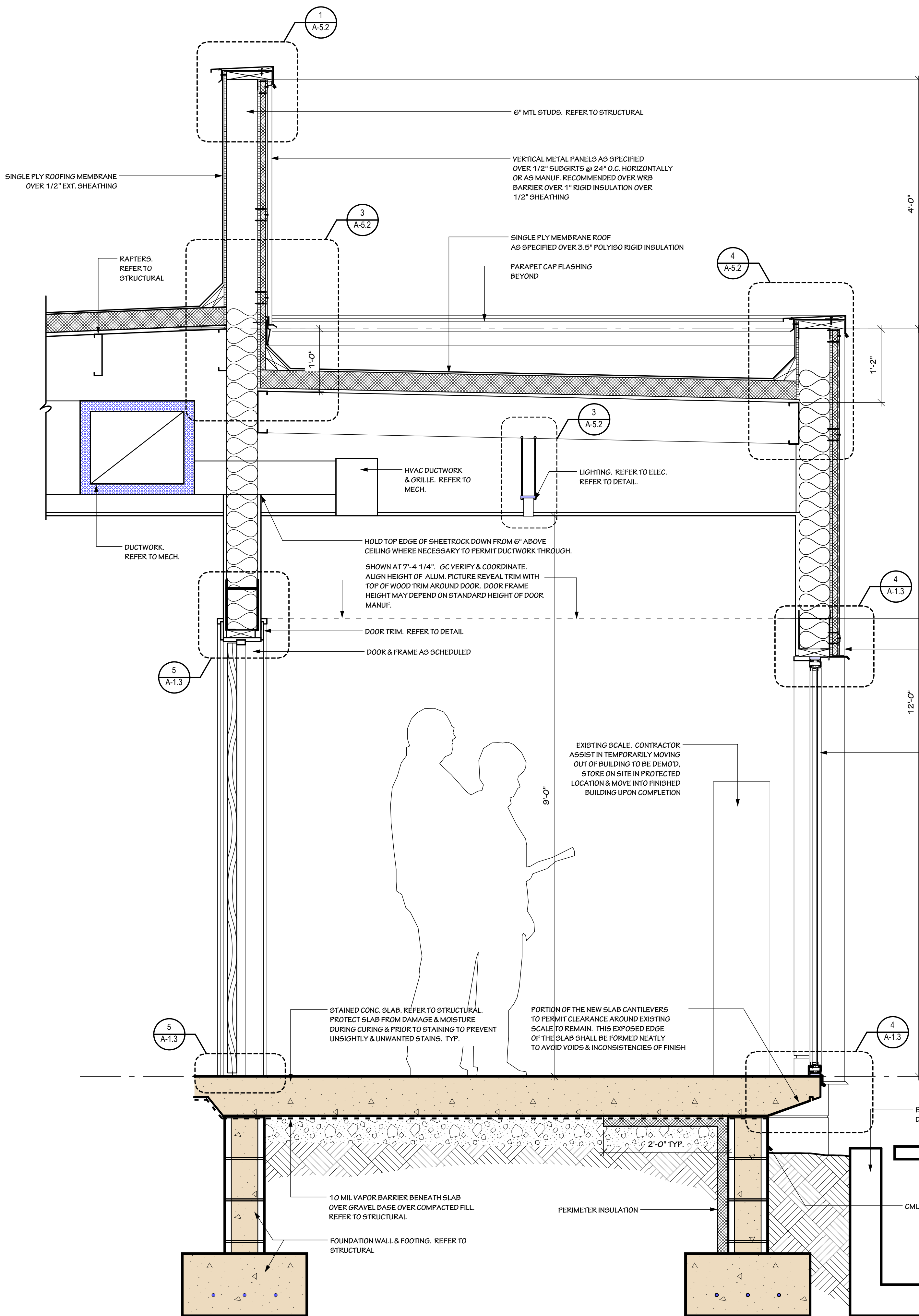


**4** SECTION THROUGH DECORATIVE CANOPY  
LOOKING NORTH  
SCALE: 1/4" = 1'-0"

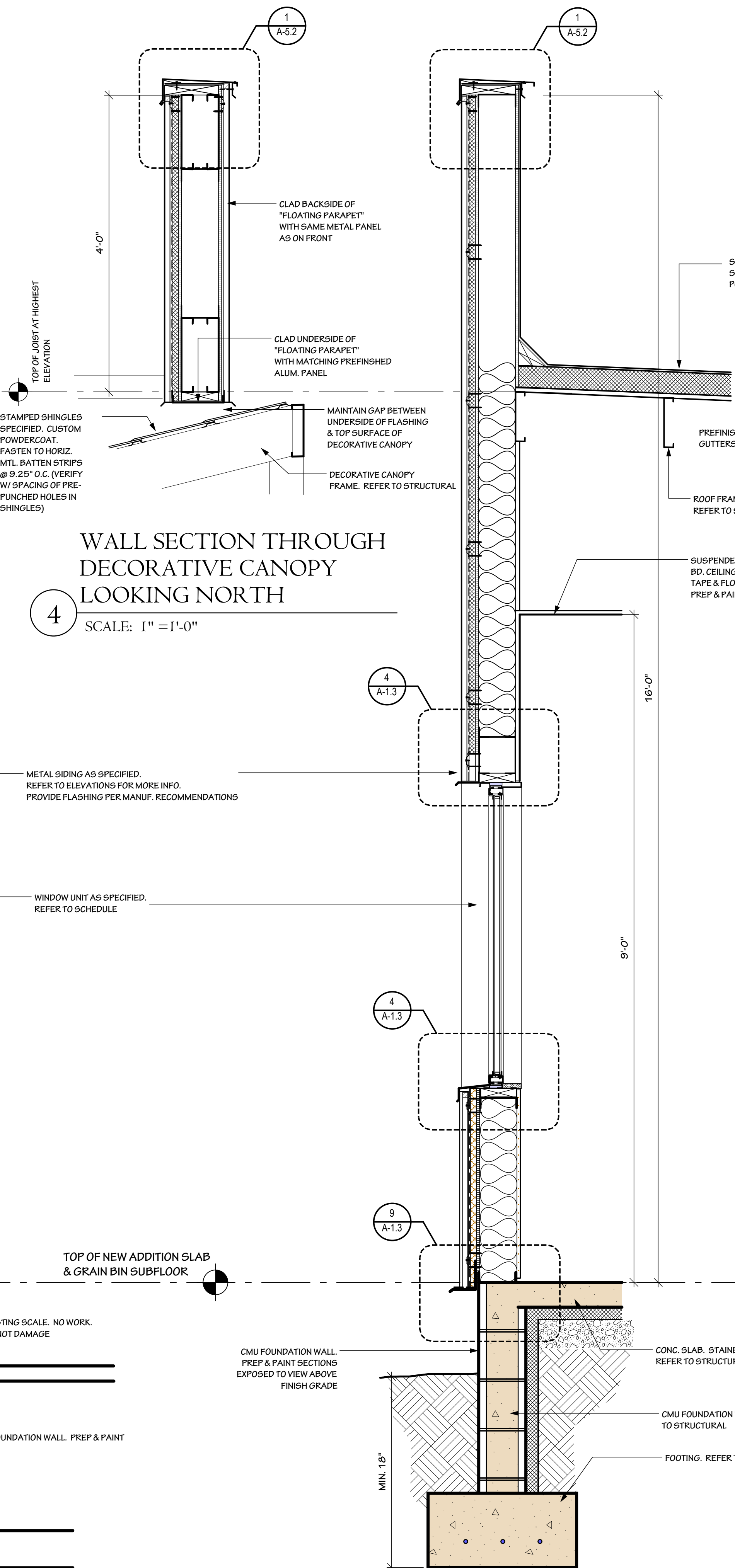


**5** SECTION THROUGH GRAIN BIN  
LOOKING NORTHWEST  
SCALE: 1/4" = 1'-0"

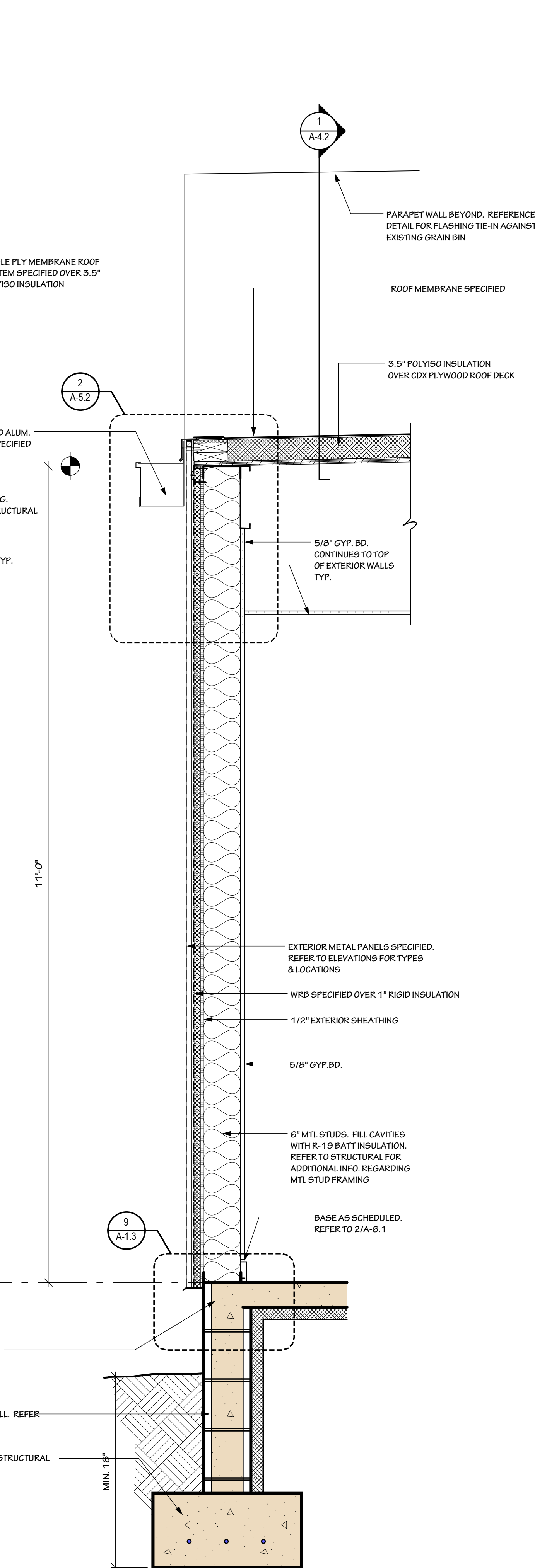
**2** SECTION THROUGH GRAIN BIN  
LOOKING NORTH  
SCALE: 1/4" = 1'-0"



**1** WALL SECTION @ GALLERY  
LOOKING SOUTH  
SCALE: 1" = 1'-0"

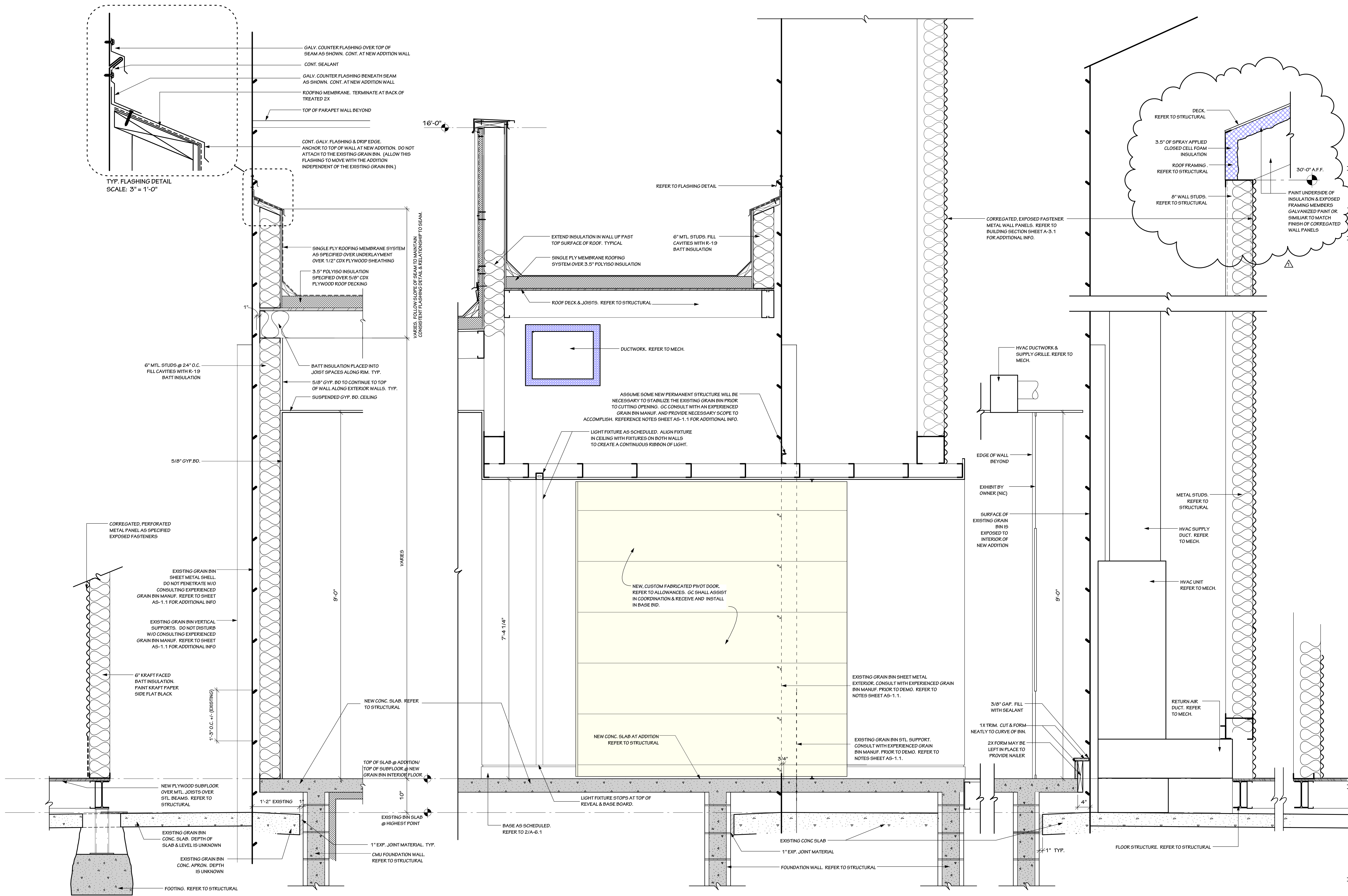


**2** WALL SECTION @ STORAGE  
LOOKING NORTH  
SCALE: 1" = 1'-0"



**3** WALL SECTION @ RESTROOMS  
LOOKING SOUTH  
SCALE: 1" = 1'-0"

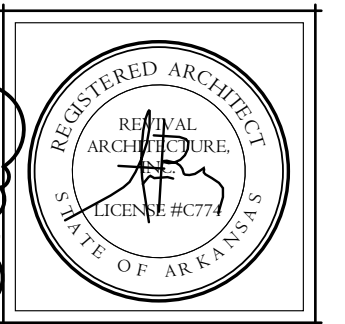
**4** WALL SECTION THROUGH  
DECORATIVE CANOPY  
LOOKING NORTH  
SCALE: 1" = 1'-0"



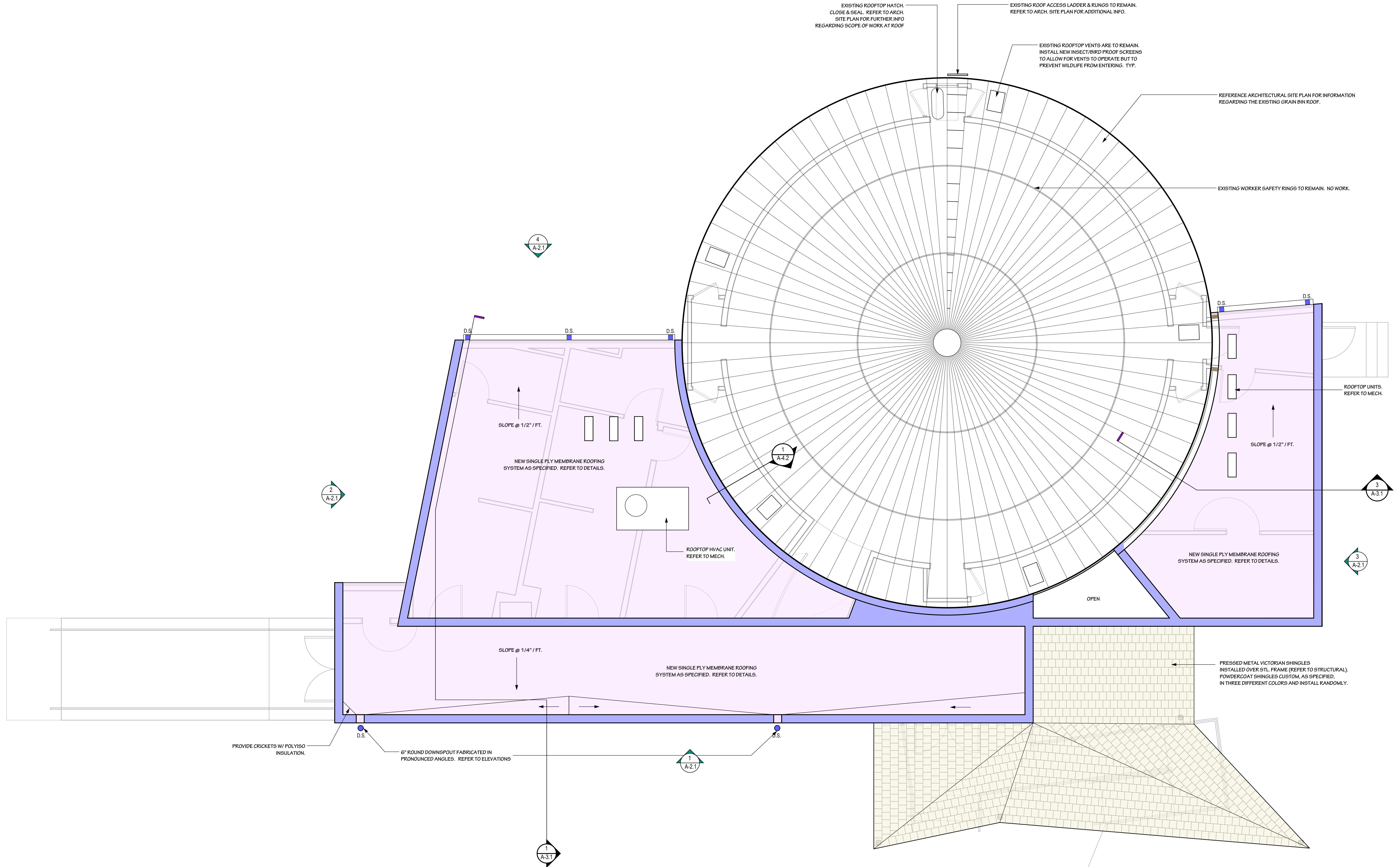
1 WALL SECTION AT GRAIN BIN SHELL  
SCALE: 1" = 1'-0"

2 SECTION DETAIL AT FLOOR JOINT  
BETWEEN ADDITION AND EXISTING BIN  
SCALE: 1" = 1'-0"

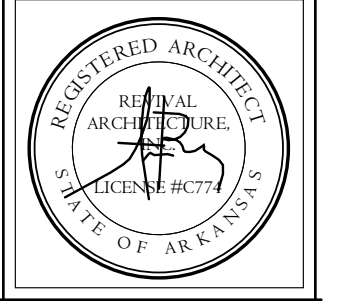
3 WALL SECTION AT GRAIN BIN SHELL  
SCALE: 1" = 1'-0"



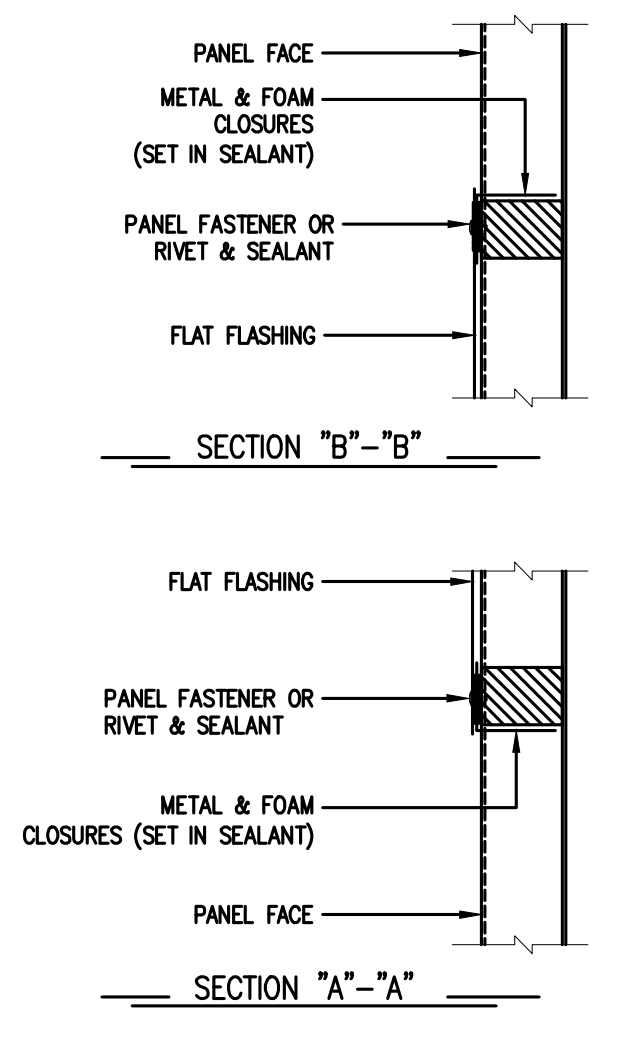
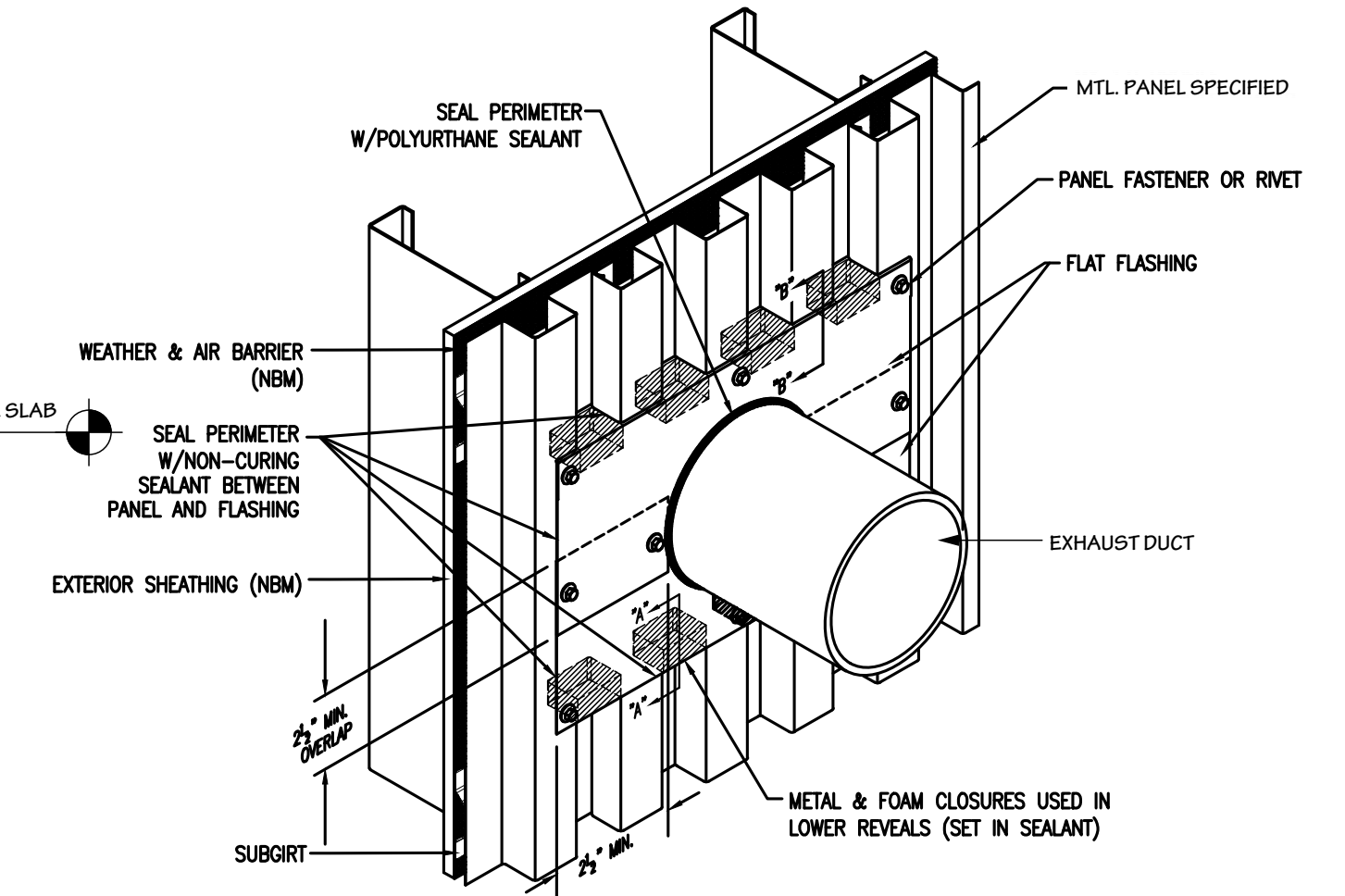
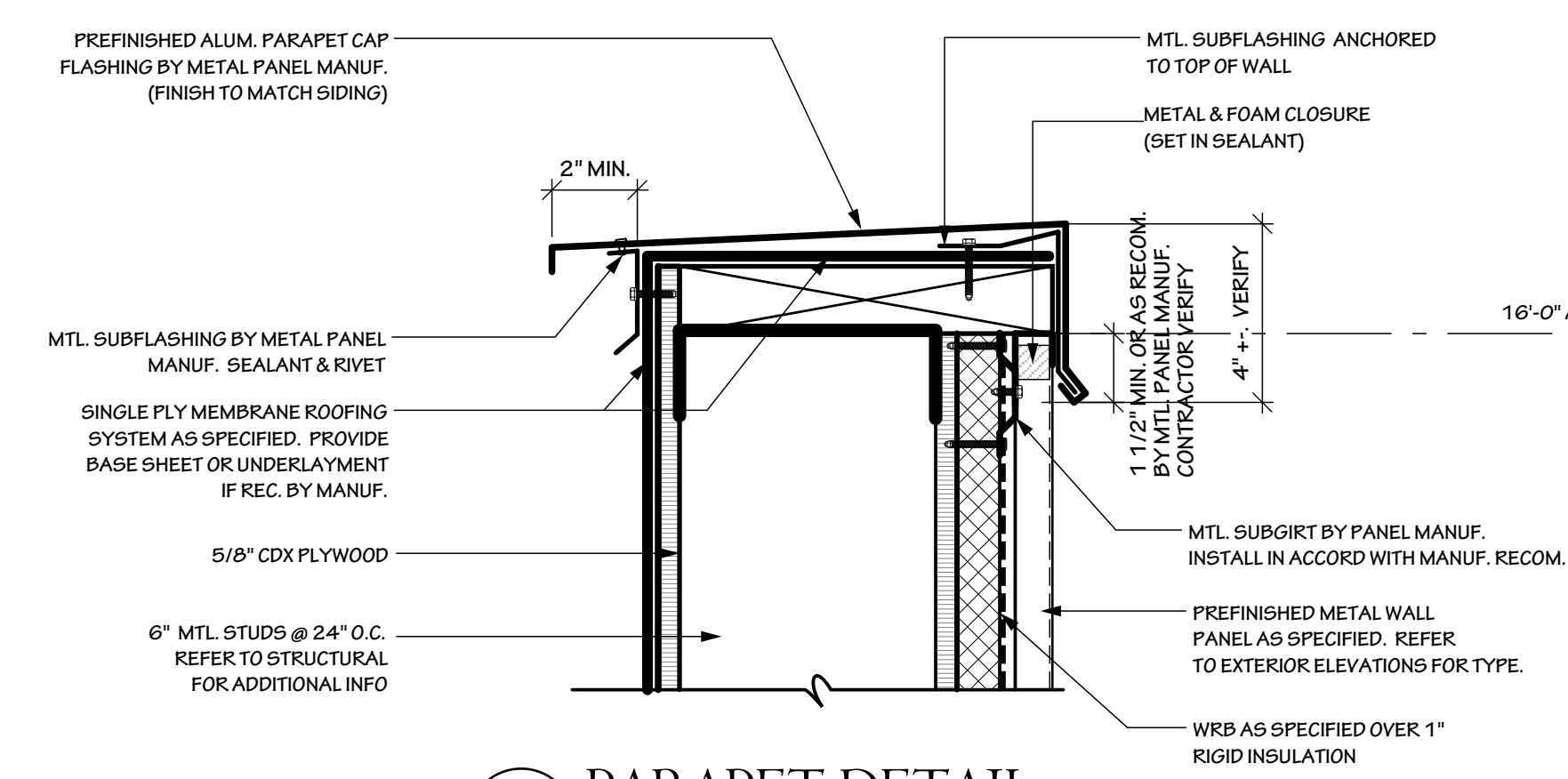




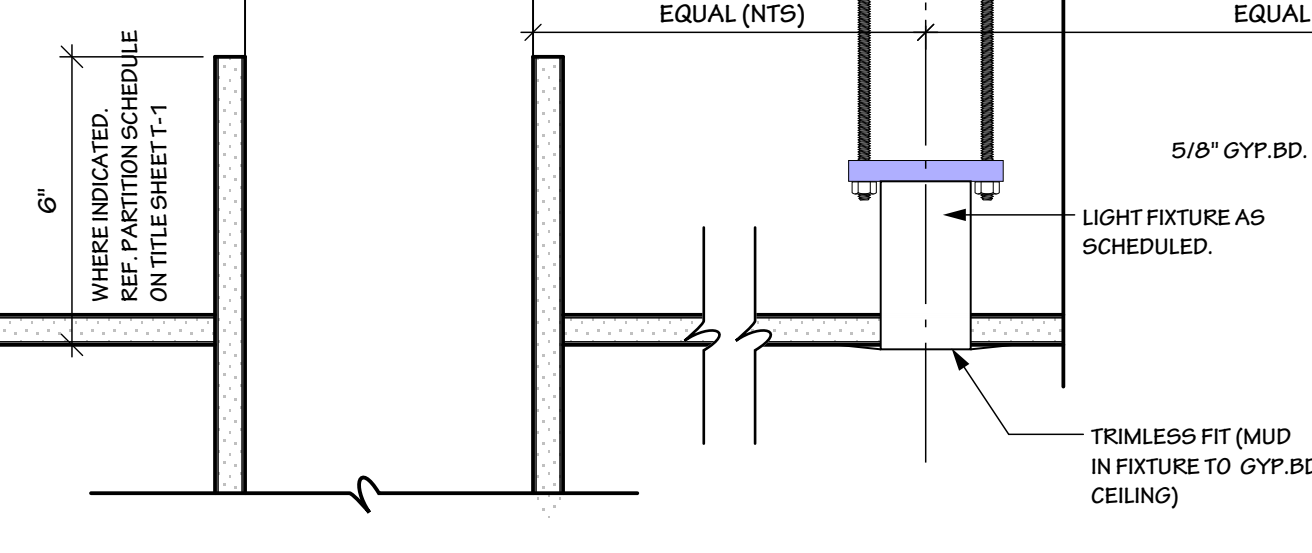
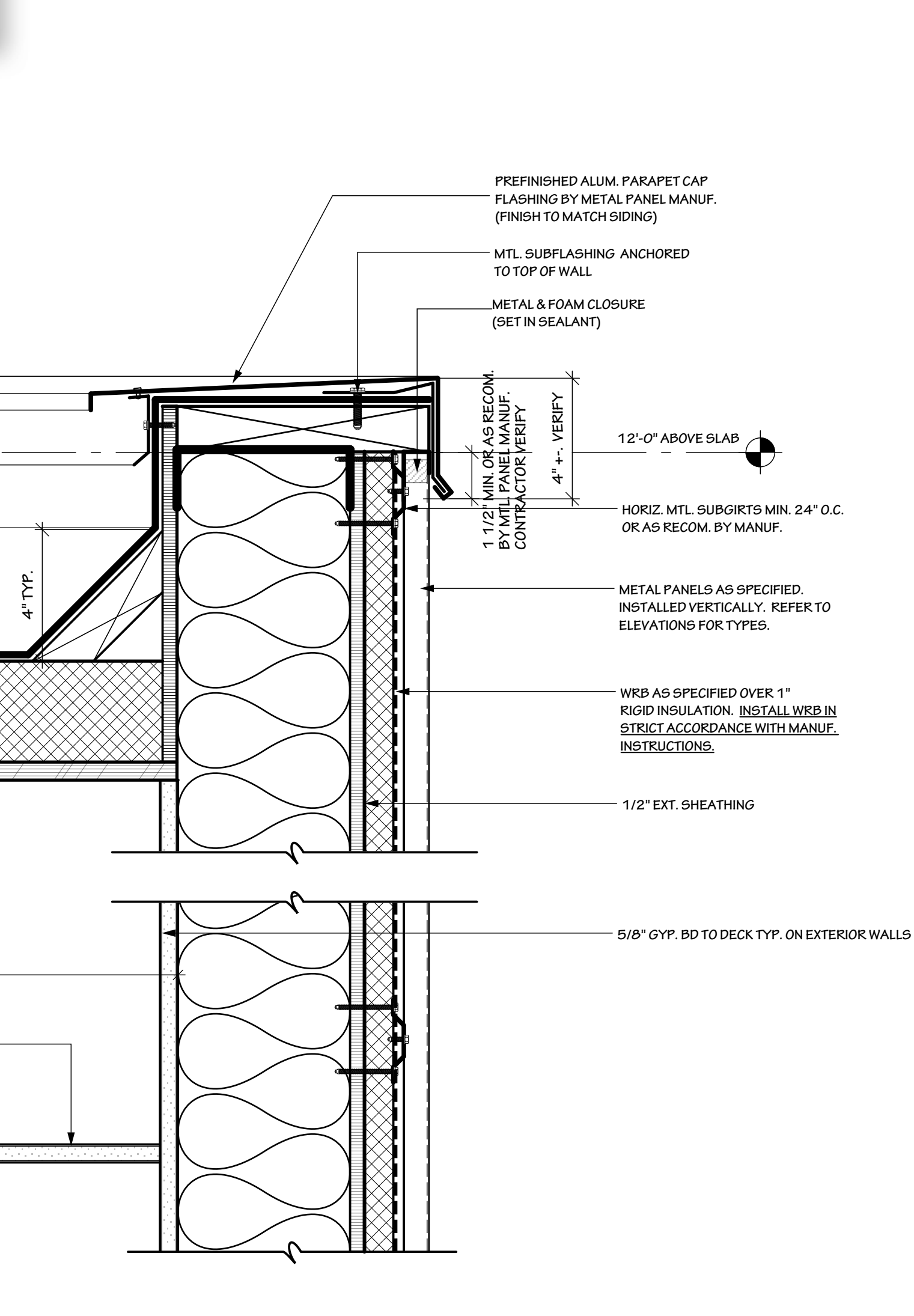
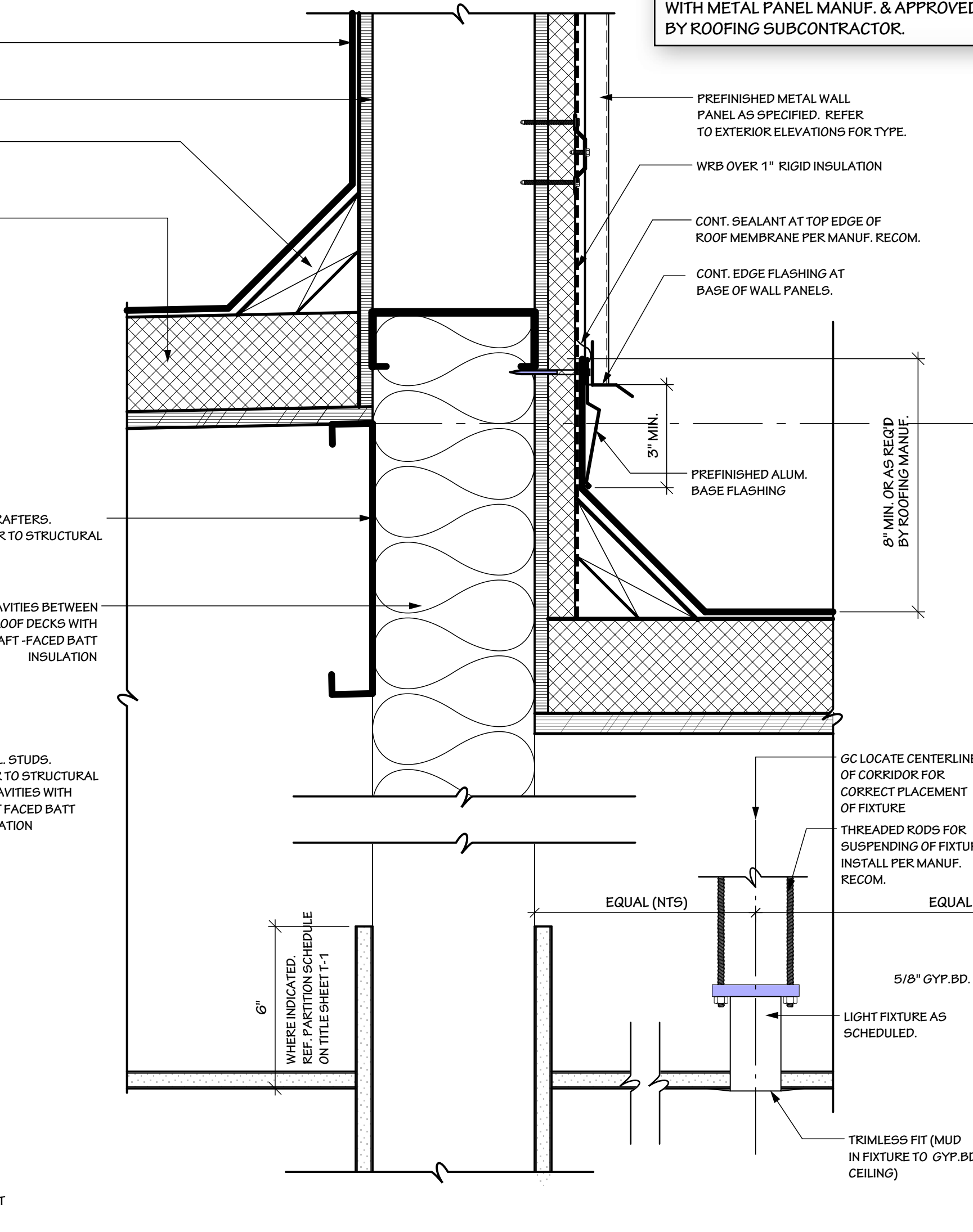
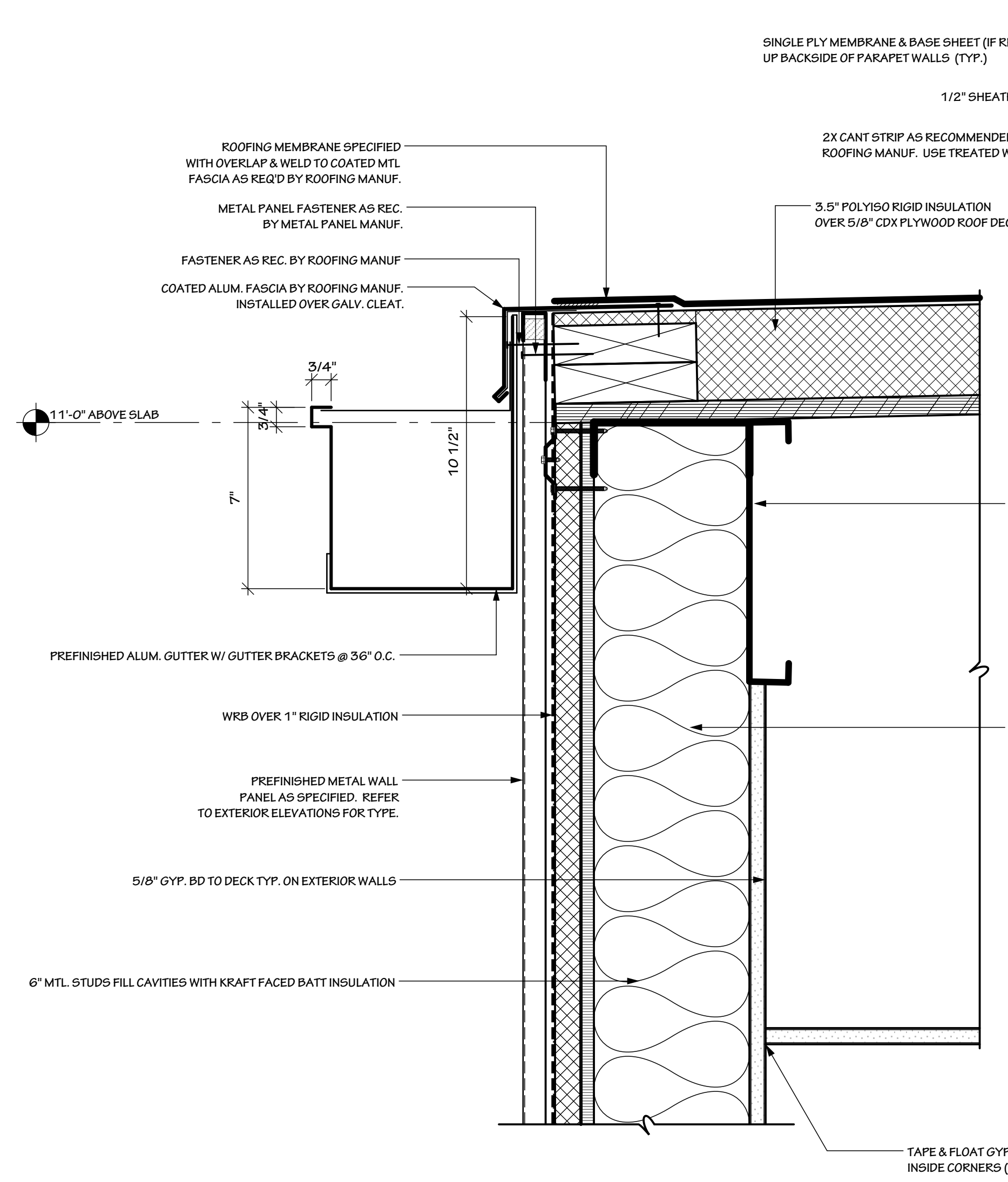
**I** ROOF PLAN  
 SCALE: 1/4" = 1'-0"  
 NORTH

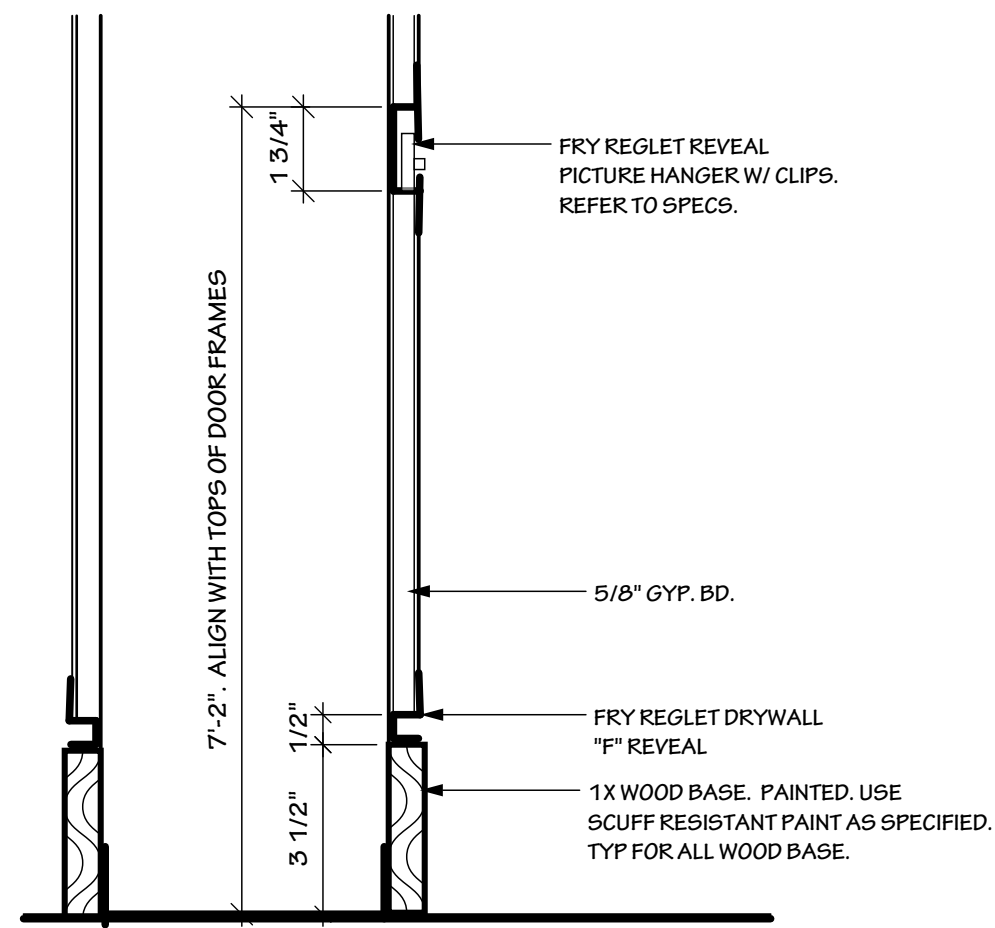


Issue Date:  
 March 1, 2024  
 Revisions:  
 RE-BID  
 April 19, 2024

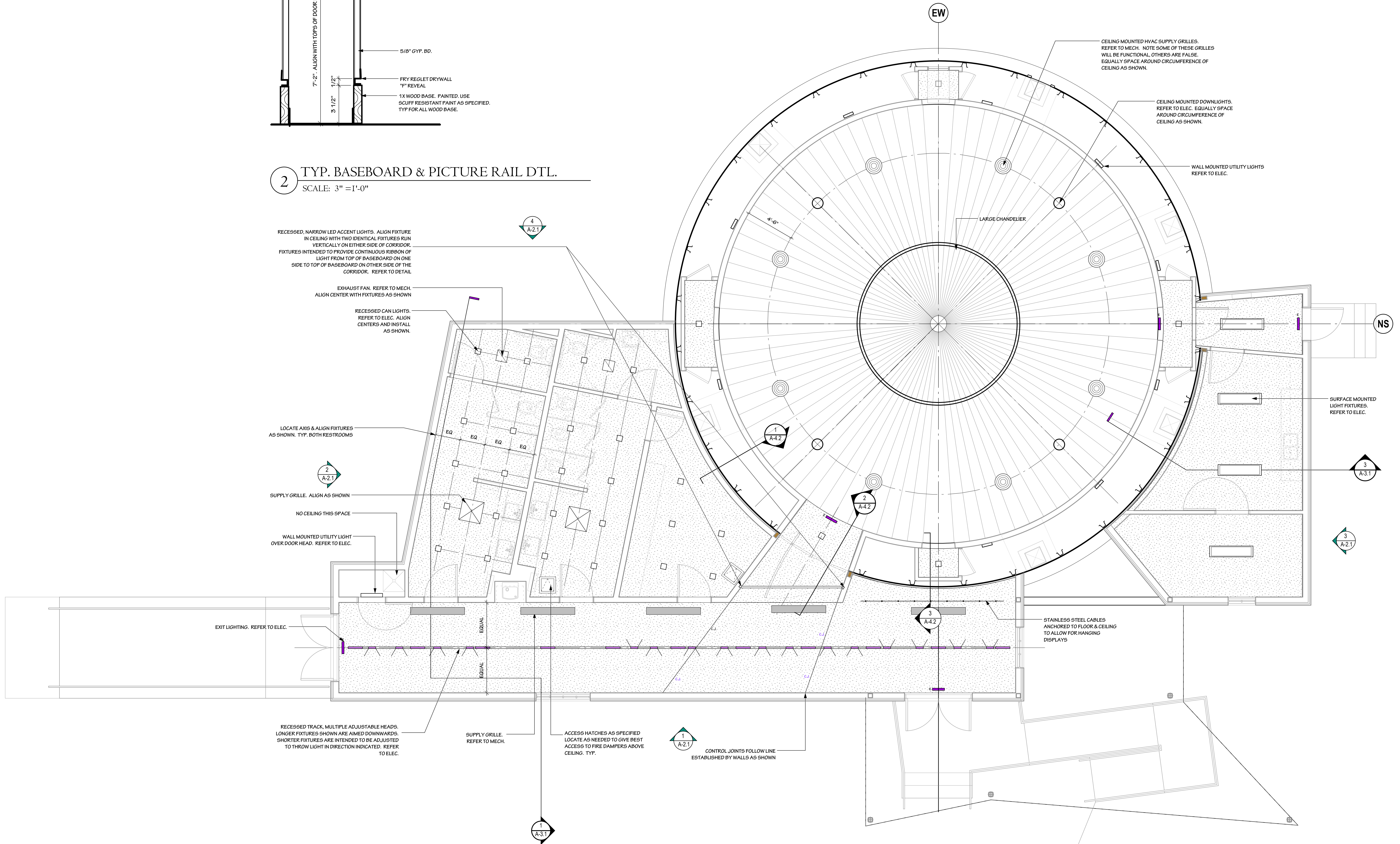


CONTRACTOR PROVIDE SHOP DRAWINGS INDICATING FINAL, VERIFIED HEIGHT OF PARAPET CAP FLASHING, COORDINATED WITH METAL PANEL MANUF. & APPROVED BY ROOFING SUBCONTRACTOR.

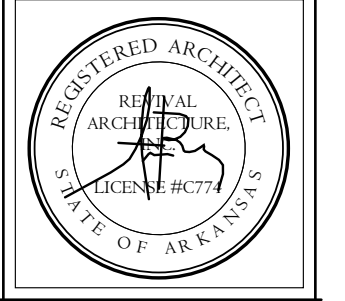




**2** TYP. BASEBOARD & PICTURE RAIL DTL.  
SCALE: 3" = 1'-0"

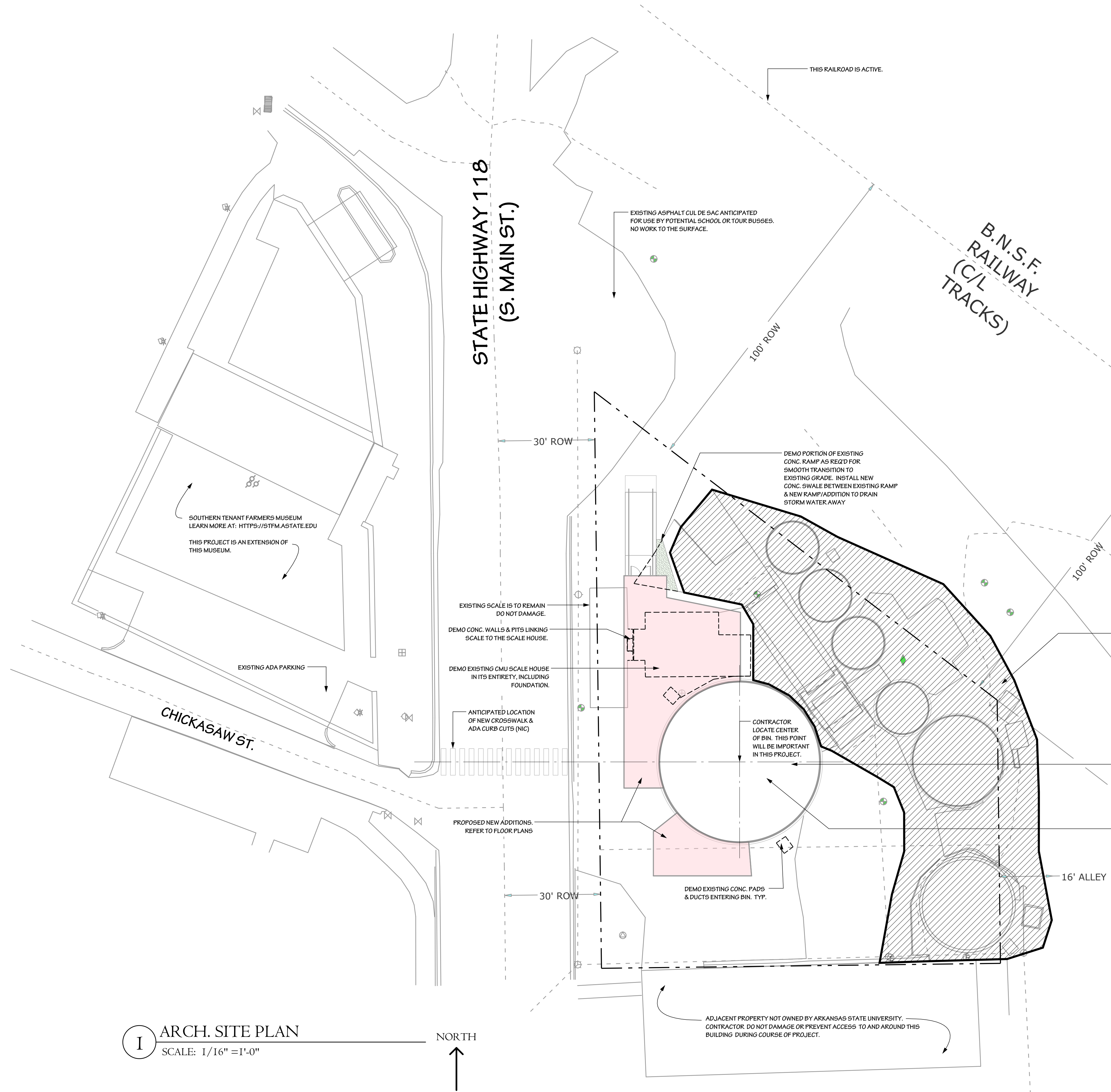
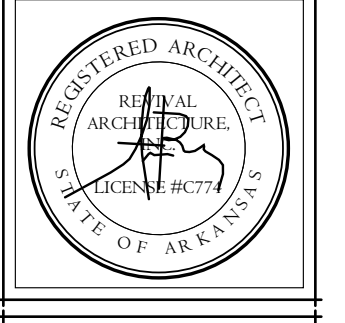


**I** REFLECTED CEILING PLAN  
SCALE: 1/4" = 1'-0" ← NORTH



GENERAL NOTES

1. THIS PROJECT IS FUNDED BY A GRANT RECEIVED FROM THE ARKANSAS NATURAL & CULTURAL RESOURCES COUNCIL. IT INVOLVES THE ADAPTIVE RE-USE OF AN ABANDONED SET OF GRAIN BINS AND OTHER STRUCTURES INTO A NEW FACILITY SUPPLEMENTING THE EDUCATIONAL OPPORTUNITIES OF THE SOUTHERN TENANT FARMERS MUSEUM, ONE OF SEVERAL ARKANSAS HERITAGE SITES RUN BY ARKANSAS STATE UNIVERSITY. THE PURPOSE OF THE PROJECT IS TO ALLOW THE MUSEUM TO EXPLAIN TO VISITORS, INCLUDING SCHOOL-AGED CHILDREN, HOW THE GRAIN BIN WORKED AS A PART OF AGRICULTURE IN THE NORTHEAST ARKANSAS ECONOMY. AS SUCH, IT WILL BE A HIGH PRIORITY FOR THE PROJECT TO MAKE THE BUILDINGS, RAMP AND IMMEDIATE SURROUNDINGS SAFE FOR CHILDREN AND THE PUBLIC. IT IS ALSO ANTICIPATED THAT THE NEW FACILITY CAN HAVE THE DUAL PURPOSE OF SERVING AS A VENUE FOR PUBLIC AND PRIVATE EVENTS SUCH AS WEDDINGS, CLASS REUNIONS & OTHER GATHERINGS.
2. IN GENERAL, EXISTING BUILDINGS AND SITE FEATURES ARE TO REMAIN AS THERE IS A STRONG PREFERENCE TO KEEP THE EXISTING FEATURES AND PLACE AS "INTACT" AS POSSIBLE, AS THE DAY IT WAS ABANDONED. THUS, TAKE PRECAUTIONS TO PRESERVE AND PROTECT EXISTING FEATURES FROM DAMAGE. OBVIOUSLY, SOME INTERVENTION WILL BE NECESSARY IN ORDER TO MAKE THE SITE SAFE, SUCH AS NEW GUARDRAILS, REMOVAL OF LADDERS, ETC... REFER TO ALLOWANCES.
3. NEITHER THE ARCHITECT NOR THE STRUCTURAL ENGINEER ON THE DESIGN TEAM ARE EXPERTS WITH GRAIN BINS. THE GENERAL CONTRACTOR SHALL ENGAGE & HIRE AN EXPERIENCED AND CAPABLE GRAIN BIN COMPANY TO CONSULT ON THE PROJECT DURING CONSTRUCTION. THE GRAIN BIN COMPANY SHALL HAVE, ON STAFF, OR HIRE AS A CONSULTANT, A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF ARKANSAS CAPABLE OF PROVIDING THE NECESSARY DESIGN INFORMATION (WHICH MAY INCLUDE DRAWING DETAILS) OF METHODS INVOLVING PARTIAL DEMOLITION, CUTTING INTO AND/OR SHORING OF THE EXISTING LARGE GRAIN BIN. REFERRECE ADDITIONAL INFORMATION BELOW.
4. CONTRACTOR MAY CONTACT THE ARCHITECT FOR A LINK GIVING ACCESS TO SITE PHOTOGRAPHS INCLUDING DRONE IMAGES. CONTACT AARON RUBY AT 501-951-3316 OR EMAIL AARON@REVIVALARCH.COM.



1 ARCH. SITE PLAN  
SCALE: 1/16" = 1'-0"  
NORTH

EXISTING LARGE BIN TO BE REHABILITATED FOR NEW, OCCUPIED SPACE. CONTRACTOR IS TO THOROUGHLY CLEAN AND SANITIZE THE EXISTING INTERIOR, WHICH IS PRESENTLY FULL OF BIRD & RODENT DROPPINGS, INCLUDING WALLS, CEILING, SLAB AND CONCRETE TRENCHES.

THE CUTTING OF NEW OPENINGS INTO THE GRAIN BIN, AS WELL AS SHORING OR OTHER PERMANENT STABILIZATION OF THE EXISTING GRAIN BIN AS A CONSEQUENCE OF NEW OPENINGS INVOLVES, BY DEFAULT, MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES ABOUT WHICH THE ARCHITECT HAS NO CONTROL OVER, CHARGE OF, OR RESPONSIBILITY. THUS, THE GENERAL CONTRACTOR BIDDING THIS PROJECT SHALL ENGAGE, HIRE AND CONSULT WITH AN EXPERIENCED & CAPABLE GRAIN BIN COMPANY THAT CAN PROVIDE, AT A MINIMUM AND NOT NECESSARILY LIMITED TO, THE FOLLOWING ANTICIPATED SCOPE OF WORK:

A. STRUCTURAL INVESTIGATION, MATERIALS TESTING AND ANALYSIS OF THE EXISTING LARGE GRAIN BIN, INCLUDING, AT A MINIMUM:

1. TEMPORARY REMOVAL AND REPLACEMENT OF EXISTING ROOF SECTIONS TO PERMIT INSPECTION OF ROOF PANELS & FASTENERS. OBTAIN AVERAGE THICKNESS & CONDITION OF ROOF PANELS, SIZE AND CONDITION OF FASTENERS.
2. INSPECTION OF THE SIDEWALL OF THE EXISTING LARGE BIN INCLUDING OBTAINING THICKNESS OF WALL PANELS IN SIX (6) DIFFERENT LOCATIONS FROM THE SLAB TO THE EAVE. INSPECTION OF THE WELDED SEAMS BY A CERTIFIED WELDING INSPECTOR.
3. OBTAIN CORE SAMPLE FROM THE EXISTING CONCRETE SLAB TO DETERMINE THICKNESS AND PRESENCE OF ANY REINFORCEMENT, IF ANY.
4. SUBMIT RESULTS TO THE ARCHITECT ALONG WITH THE GRAIN BIN COMPANY'S STRUCTURAL ANALYSIS AND OPINION OF FINDINGS RELATIVE TO THE LARGE GRAIN BIN'S ABILITY TO WITHSTAND WIND & SNOW LOADS.

B. DESIGN & CONSULTATION ON THE CUTTING OF NEW LARGE OPENINGS INTO THE SIDEWALL OF THE GRAIN BIN, AS IS NECESSARY TO ACCOMMODATE THE NEW DOORWAYS SHOWN. ASSUME SOME NEW STEEL STRUCTURE WILL BE NECESSARY TO ALLOW FOR THESE OPENINGS W/O COMPROMISE TO THE SHELL OF THE GRAIN BIN.

C. CUTTING/DRILLING OF MINOR HOLES INTO THE GRAIN BIN, AS MAY BE REQUIRED BY MEP TRADES.

D. CLOSING/PATCHING OF ANY UNDESIRABLE VENTS/HOLES/HATCHES THAT MIGHT ALLOW THE INTRUSION OF INSECTS, BIRDS OR RODENTS, IN PARTICULAR ALONG THE ROOF AND WALL INTERSECTION.

THE GENERAL CONTRACTOR SHALL COORDINATE SAFE ACCESS TO ALLOW FOR THIS WORK TO TAKE PLACE.


















ALL OF THE WORK LISTED ABOVE SHALL BE INCLUDED WITHIN THE BID, ALONG WITH ANY MATERIALS AND LABOR NECESSARY FOR SUCH WORK TO TAKE PLACE. CONTRACTOR AND GRAIN BIN COMPANY SHALL ASSUME THAT THE STRUCTURAL TESTING AND ANALYSIS WILL REVEAL THAT THE EXISTING GRAIN BIN IS CAPABLE OF WITHSTANDING REASONABLE WIND & SNOW LOADS, AND THAT NO MAJOR STRUCTURAL STABILIZATION WILL BE NECESSARY AS A RESULT OF FINDINGS OF TESTING AND ANALYSIS. IT IS NOT EXPECTED THAT THE CONTRACTOR INCLUDE IN HIS BID ANY SIGNIFICANT SCOPE WITH REGARDS TO THE EXISTING GRAIN BIN STRUCTURE, SUCH AS TOTAL ROOF REPLACEMENT OR MAJOR SHORING OR REPLACEMENT OF MAJOR STRUCTURAL FEATURES OF THE GRAIN BIN.

**GENERAL NOTES:**

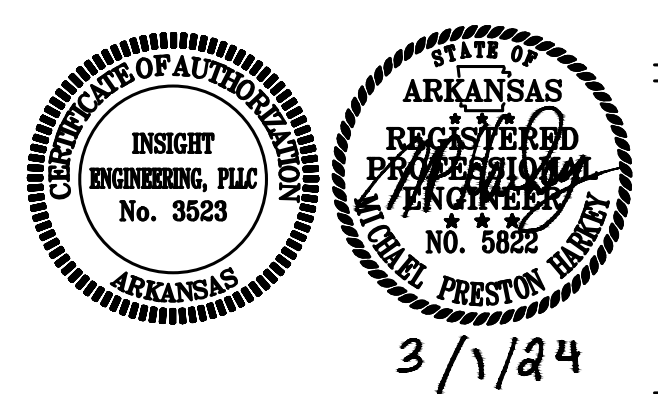
1. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL INSTALLATION WITH THE WORK OF OTHER TRADES. FIELD MODIFICATIONS NEEDED DUE TO OBSTRUCTIONS OR INTERFERENCES SHALL BE PROVIDED AT NO ADDITIONAL COST.
2. ALL WORK SHALL BE PERFORMED IN A NEAT AND WORKMANLIKE MANNER WITHIN STANDARD OF CARE FOR PROFESSION. ALL LABOR, MATERIAL, TOOLS, PERMITS, INSPECTIONS, TESTING, CERTIFICATION, ETC. REQUIRED FOR A COMPLETE AND SATISFACTORY INSTALLATION TO DESIGN INTENT SHALL BE FURNISHED BY CONTRACTOR. PROVIDE, AT NO ADDITIONAL COST, INCLUDING INCIDENTAL ITEMS NOT SHOWN WHEN REQUIRED FOR TYPICAL COMPLETION OF WORK.
3. DRAWINGS NOT BEARING THE STAMP OR SEAL AND SIGNATURE OF A REGISTERED PROFESSIONAL ENGINEER SHALL NOT BE USED FOR BIDDING OR CONSTRUCTION PURPOSES UNLESS EXPRESSLY APPROVED IN WRITING BY THE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL DRAWINGS AND SPECIFICATIONS BEING USED FOR BIDDING AND CONSTRUCTION PURPOSES ARE OF THE LATEST REVISION AVAILABLE AND ALL ADDENDUM DOCUMENTS HAVE BEEN INCORPORATED EITHER BY REVISION RELEASE OF DRAWINGS/SPECIFICATIONS OR ATTACHMENT OF SKETCHES OR OTHER ADDENDUM INFORMATION.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW PRODUCTS OF ESTABLISHED AND REPUTABLE MANUFACTURERS. NO EQUIPMENT SUBSTITUTIONS SHALL BE MADE THAT WOULD LEAVE INADEQUATE OPERATING OR SERVICE SPACE. EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED INSTALLATION PROCEDURES AND IN AN ARRANGEMENT THAT WILL GIVE THE GREATEST PRACTICAL EASE OF OPERATION AND SERVICE TO THE OWNER.
5. ALL EQUIPMENT WHICH IS INDICATED TO BE FURNISHED AND/OR INSTALLED BY OTHERS OR BY OWNER IS INCLUDED FOR REFERENCE ONLY UNLESS NOTED OTHERWISE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND VERIFYING INSTALLATION REQUIREMENTS OF THIS EQUIPMENT WITH THE APPLICABLE SUPPLIER OR THE OWNER. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
6. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ALL APPLICABLE CODES AND REGULATIONS INCLUDING BUT NOT LIMITED TO NATIONAL, CITY, STATE, LOCAL ORDINANCES, AND UTILITY COMPANY REGULATIONS. ALL PLUMBING MATERIALS, INSTALLATION PROCEDURES, AND SYSTEM LAYOUTS SHALL BE APPROVED BY ALL APPLICABLE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THESE RULES, REGULATIONS, AND ORDINANCES. THESE CODES REPRESENT THE MINIMUM ACCEPTABLE REQUIREMENTS. THEREFORE, WHERE DRAWINGS AND/OR SPECIFICATIONS INDICATE MATERIALS OR CONSTRUCTION MORE STRINGENT THAT CODE REQUIREMENTS, THE DRAWINGS AND/OR SPECIFICATIONS SHALL GOVERN.
7. IF COMPLIANCE WITH STANDARDS, CODES, REGULATIONS AND CONTRACT DOCUMENTS ESTABLISH DIFFERENT OR CONFLICTING REQUIREMENTS FOR MINIMUM QUANTITIES OR QUALITY LEVELS, REFER CONFLICTING REQUIREMENTS TO ENGINEER FOR A DECISION BEFORE PROCEEDING.
8. WHERE CONTRACT DOCUMENTS NAME A SINGLE MANUFACTURER AND PRODUCT, PROVIDE THE NAMED PRODUCT THAT COMPLIES WITH REQUIREMENTS. COMPARABLE PRODUCTS OR SUBSTITUTIONS FOR CONTRACTOR'S CONVENIENCE WILL BE CONSIDERED. THE PROJECT.
9. CLOSEOUT SUBMITTALS SHALL INCLUDE, BUT NOT LIMITED TO, OPERATION AND MAINTENANCE MANUALS AND RECORD DRAWINGS.
10. THE CONTRACTOR SHALL VISIT THE SITE OF THE BUILDING BEFORE SUBMITTING A PROPOSAL ON THIS WORK AND SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND OPERATIONS. FAILURE ON CONTRACTORS PART TO DO THIS WILL NOT BE CAUSE OF EXTRAS AFTER THE CONTRACT IS SIGNED, BY REASON OF UNFORESEEN CONDITIONS.
11. NO PERSON SHALL PERFORM ELECTRICAL WORK ON THE CONTRACT WITHOUT POSSESSING A MASTER'S OR JOURNEYMAN'S LICENSE FROM THE STATE ELECTRICAL EXAMINERS BOARD. ALL ELECTRICAL WORK AND APPRENTICE ELECTRICIANS SHALL BE SUPERVISED BY A MASTER JOURNEYMAN ELECTRICIAN ON A ONE TO ONE RATIO.
12. PREPARE AND SUBMIT SUBMITTALS TO ARCHITECT.
13. ALL AREAS USED AS RETURN AIR PLENUMS SHALL BE CONSTRUCTED WITH FIRE RESISTANT MATERIALS AND SHALL ONLY CONTAIN MATERIALS WHICH HAVE SMOKE DEVELOPED RATINGS NOT GREATER THAN 50 AND FLAME SPREAD RATINGS NOT GREATER THAN 25.
14. ALL ELECTRICAL EQUIPMENT, SUCH AS SWITCHES, CIRCUIT BREAKERS, ETC. SHALL BE TESTED BY OPERATING THE DEVICE TO VERIFY THAT THE MECHANICAL PORTIONS OF THE DEVICE ARE FUNCTIONING.
15. THE CONTRACT SHALL ASSIST ALL OTHER TRADES IN PERFORMING ROTATIONAL TESTS ON ALL MOTORS PROVIDED UNDER THIS CONTRACT.
16. ALL EXPOSED CONDUIT SHALL BE GALVANIZED RIGID STEEL.
17. WIRE SIZE PER CODE UNLESS NOTED ELSEWHERE:
 

	WIRE SIZE 120V
A.	#12 LESS THAN 75 FEET
B.	#10 BETWEEN 75-150 FEET
C.	#8 BETWEEN 150-250 FEET
D.	#6 BETWEEN 250-375 FEET

**LEGEND**

 ID  ID  ID  ID  ID  ID  ID  ID  ID  ID  ID  ID  ID  ID 	<p>WALL MOUNT STRIP LIGHT.</p> <p>WALL PACK LIGHT FIXTURE.</p> <p>RECESSED ROUND DOWN LIGHT.</p> <p>RECESSED SQUARE DOWN LIGHT.</p> <p>2X4 LED TROFFER.</p> <p>2X4 LED TROFFER ON EMERGENCY POWER.</p> <p>2X2 LED TROFFER.</p> <p>2X2 LED TROFFER ON EMERGENCY POWER.</p> <p>4 LED STRIP</p> <p>WALL LIGHT RECTANGLE</p> <p>EMERGENCY LIGHT</p> <p>PENDANT LIGHT</p>	<p>⊖ DUPLEX RECEPTACLE (TYPE 5362). MOUNT 18" AFF UNLESS OTHERWISE NOTED.</p> <p>⊖ QUADRUPLEX RECEPTACLE (TYPE 5362). MOUNT 18" AFF UNLESS OTHERWISE NOTED.</p> <p>⊖ DUPLEX RECEPTACLE GROUND FAULT TYPE GF5362.</p> <p>⊖ QUADRUPLEX RECEPTACLE GROUND FAULT TYPE GF5362.</p> <p>⊖ DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER.</p> <p>⊖ QUADRUPLEX RECEPTACLE MOUNTED ABOVE COUNTER.</p> <p>⊖ EMERGENCY RECEPTACLE.</p> <p>⊖ SPECIAL RECEPTACLE AS NOTED ON THE PLANS.</p>
SWITCHES		
<p>HARD WIRED</p> <p>S</p> <p>SD</p> <p>S3</p> <p>S4</p> <p>SD3</p> <p>SO</p> <p>SO3</p> <p>SM</p> <p>↪</p> <p>OS</p> <p>⊖</p> <p>⊖</p>	<p>SINGLE POLE SWITCH. "D" DENOTES DIMMER. "3" 3-WAY. "4" 4-WAY. "3" 3-WAY DIMMER. COORDINATE WITH FIXTURE/LAMP TYPE AND CIRCUIT WATTAGE.</p> <p>WALL MOUNTED DUAL TECH. MOTION SENSOR SWITCH WIRE PER MANUFACTURERS RECOMMENDATION. PROVIDE CONTACTORS TO CONTROL EXHAUST FAN WITH LIGHTS.</p> <p>WALL MOUNTED DUAL TECHNOLOGY 3WAY OCCUPANCY SENSOR SWITCH. WIRE PER MANUFACTURERS RECOMMENDATION.</p> <p>MOTOR RATED SWITCH USED FOR EQUIPMENT DISCONNECTING MEANS. SINGLE PHASE. PROVIDE MANUAL MOTOR STARTER WITH THERMAL OVERLOAD RELAYS SIZED PER MOTOR LOAD.</p> <p>BRANCH CIRCUIT HOMERUN. PANEL AND CIRCUIT NUMBER INDICATED.</p> <p>CEILING MOUNTED DUAL TECH. OCCUPANCY SENSOR. PROVIDE AND INSTALL APPROPRIATE POWER PACK. COORDINATE SWITCHING, LOCATION AND QUANTITY WITH ACTUAL OCCUPANCY SENSOR USED. WIRE PER MANUFACTURERS RECOMMENDATION. PROVIDE OCCUPANCY SENSOR WHICH IS THE CORRECT TYPE FOR THE SPACE. PROVIDE CONTACTORS TO CONTROL EXHAUST FAN WITH LIGHTS.</p> <p>EXIT SIGN/COMBINATION EXIT/EMERGENCY LIGHT</p> <p>EXIT SIGN/COMBINATION EXIT/EMERGENCY LIGHT (WITH DIRECTIONAL ARROWS).</p>	<p> ELECTRICAL PANEL.</p> <p> TELEPHONE AND FIRE ALARM</p> <p> REVISION DELTA.</p>

PROJECT NAME:  
 SOUTHERN TENANT FARMERS UNION MUSEUM GRAIN BIN RESTORATION  
 ISSUE DATE:  
 March 1, 2024  
 RE-BID  
 April 19, 2024

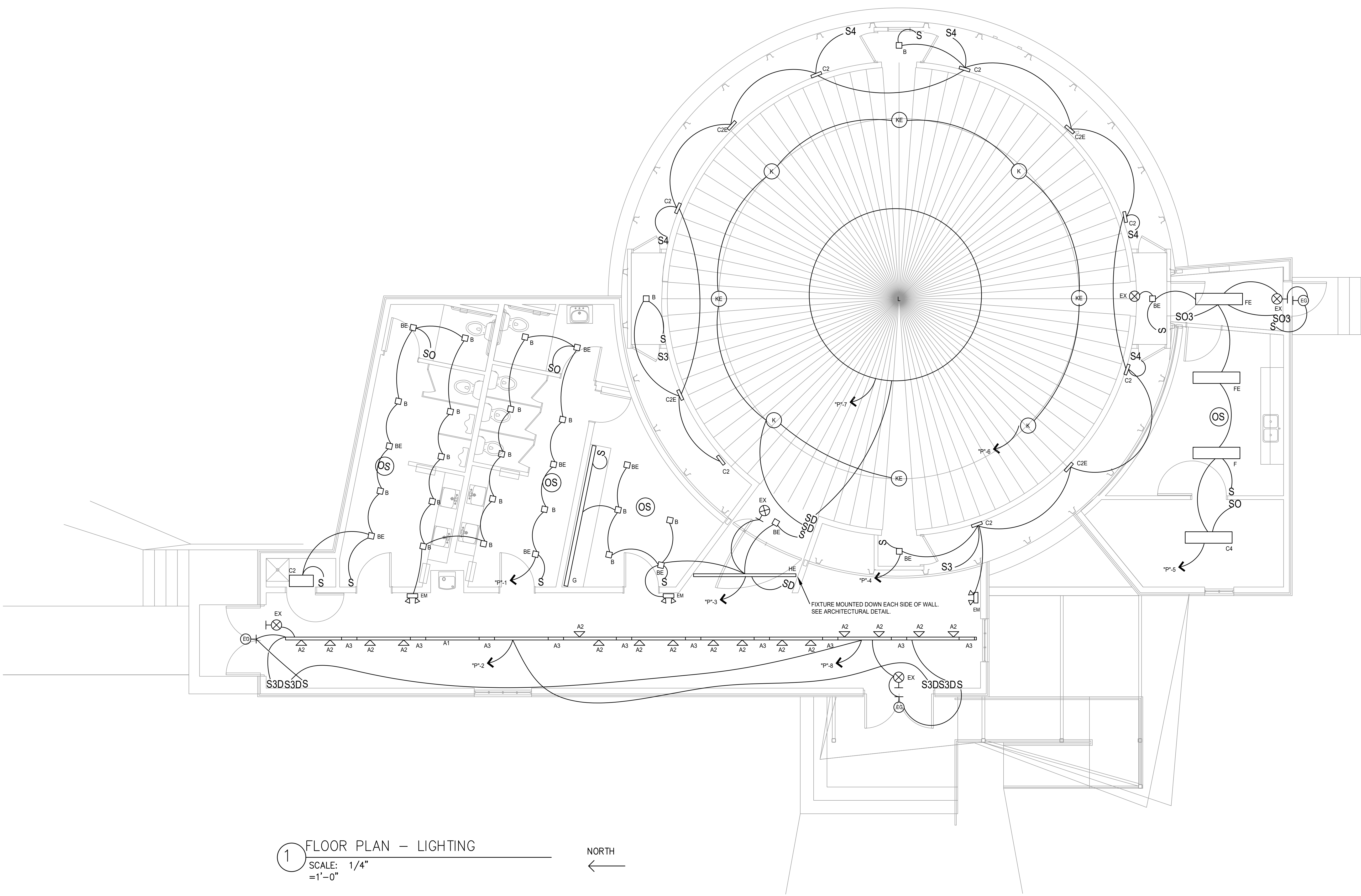


**GENERAL NOTES:**

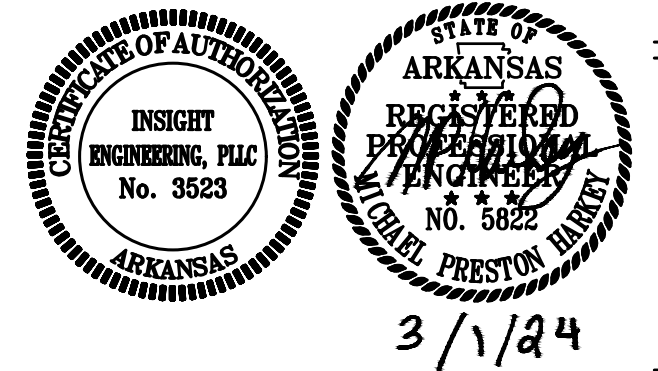
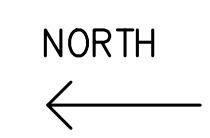
1. ELECTRICAL CONTRACTOR TO LOCATE, ALIGN, AND SPACE LIGHT FIXTURES AS SHOWN ON THE ARCHITECTURAL PLANS.
2. IN GRAIN BIN AREA ALL ROUGH-IN AND INSTALLATION TO BE COORDINATED WITH GRAIN BIN MANUFACTURER AND ARCHITECT PRIOR TO ROUGH-IN.

ISSUE DATE:  
March 1, 2024  
RE-BID  
April 19, 2024

Sheet No:  
**E-1.2**



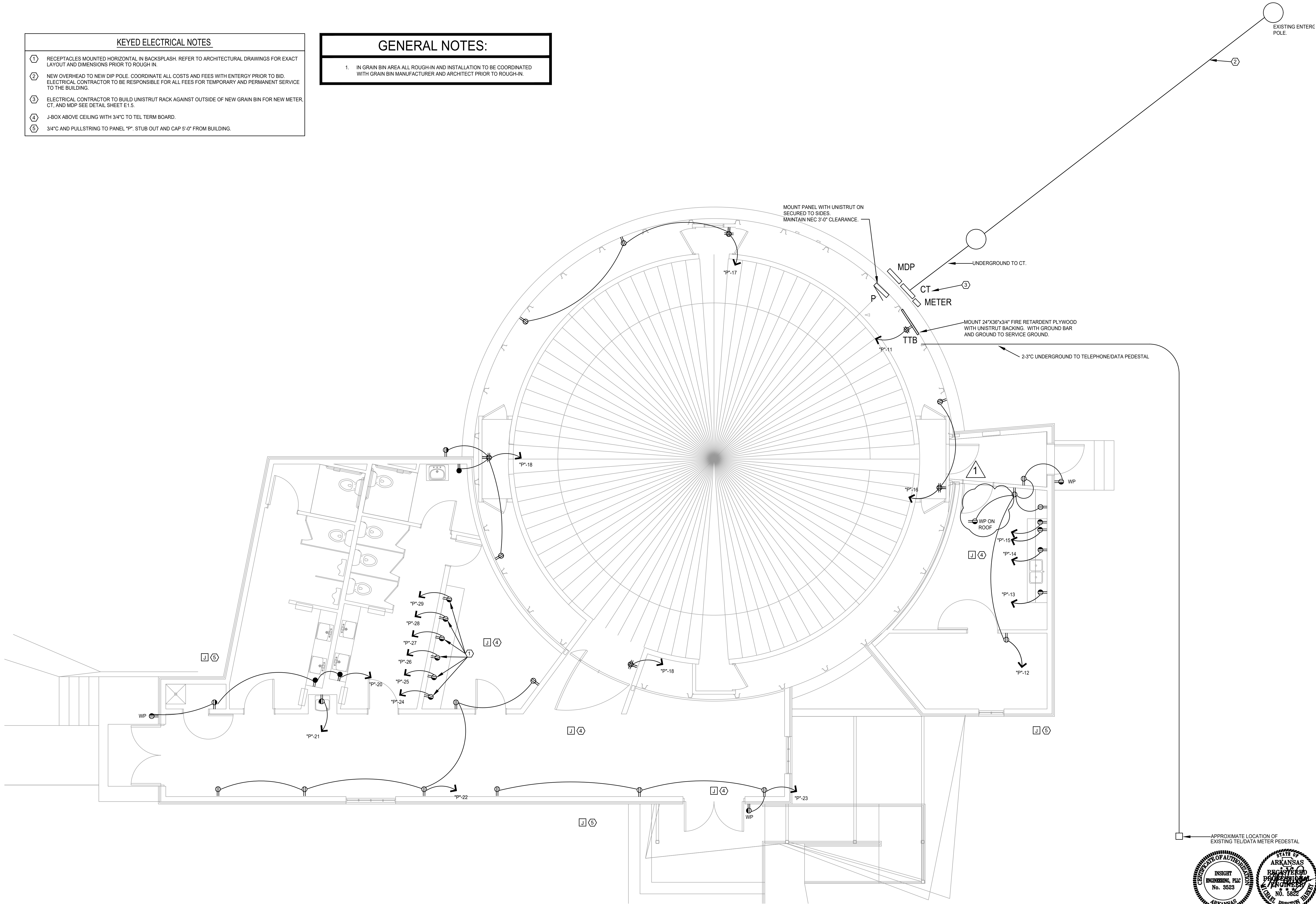
**1 FLOOR PLAN - LIGHTING**  
SCALE: 1/4"  
= 1'-0"



KEYED ELECTRICAL NOTES	
①	RECEPTACLES MOUNTED HORIZONTAL IN BACKSPASH. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LAYOUT AND DIMENSIONS PRIOR TO ROUGH IN.
②	NEW OVERHEAD TO NEW DIP POLE. COORDINATE ALL COSTS AND FEES WITH ENTERGY PRIOR TO BID. ELECTRICAL CONTRACTOR TO BE RESPONSIBLE FOR ALL FEES FOR TEMPORARY AND PERMANENT SERVICE TO THE BUILDING.
③	ELECTRICAL CONTRACTOR TO BUILD UNISTRUT RACK AGAINST OUTSIDE OF NEW GRAIN BIN FOR NEW METER, CT, AND MDP SEE DETAIL SHEET E1.5.
④	J-BOX ABOVE CEILING WITH 3/4" C TO TEL TERM BOARD.
⑤	3/4" C AND PULLSTRING TO PANEL "P". STUB OUT AND CAP 5'-0" FROM BUILDING.

**GENERAL NOTES:**

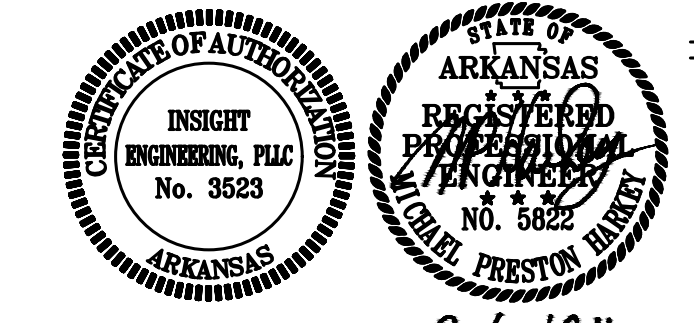
- IN GRAIN BIN AREA ALL ROUGH-IN AND INSTALLATION TO BE COORDINATED WITH GRAIN BIN MANUFACTURER AND ARCHITECT PRIOR TO ROUGH-IN.



ISSUE DATE:  
March 1, 2024  
RE-BID  
April 19, 2024

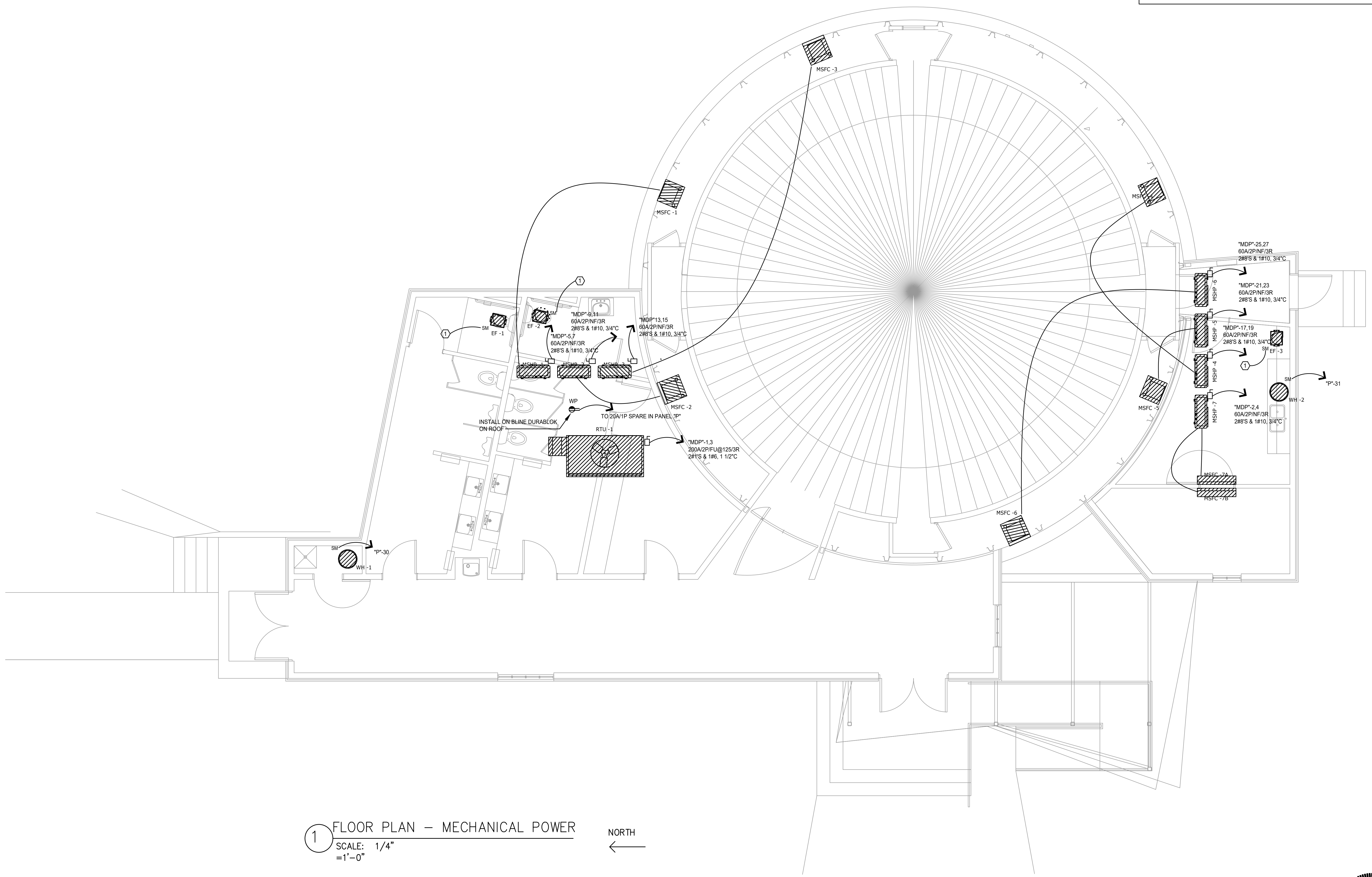
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E-1.3

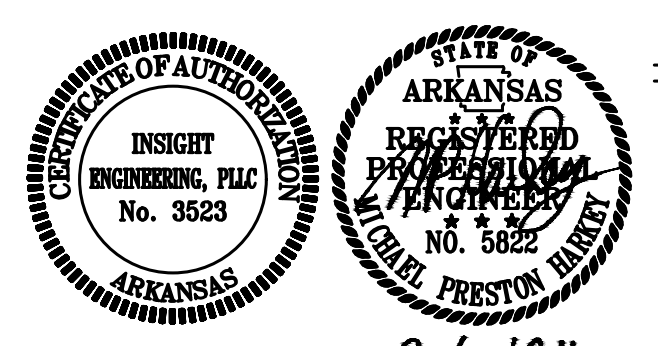


3/1/24

KEYED ELECTRICAL NOTES  
① CONNECT TO ROOM LIGHTING CIRCUIT AND SWITCHING.

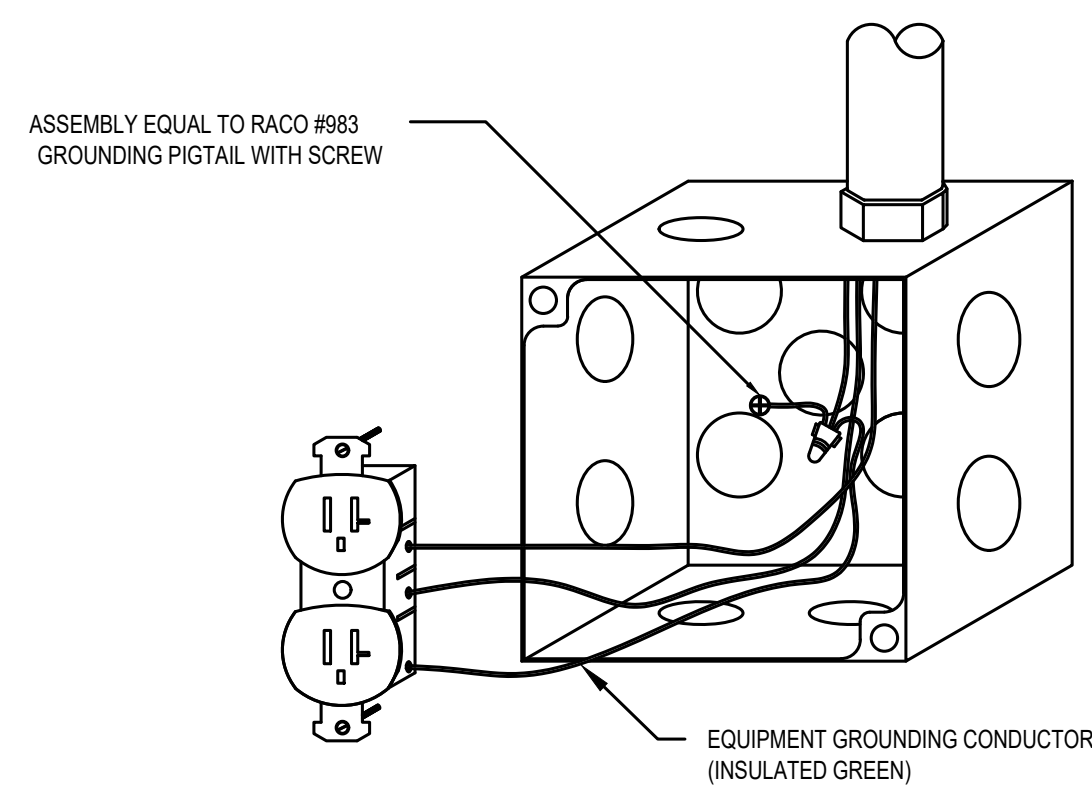


① FLOOR PLAN - MECHANICAL POWER  
SCALE: 1/4"  
=1'-0"  
NORTH  
←



3/1/24

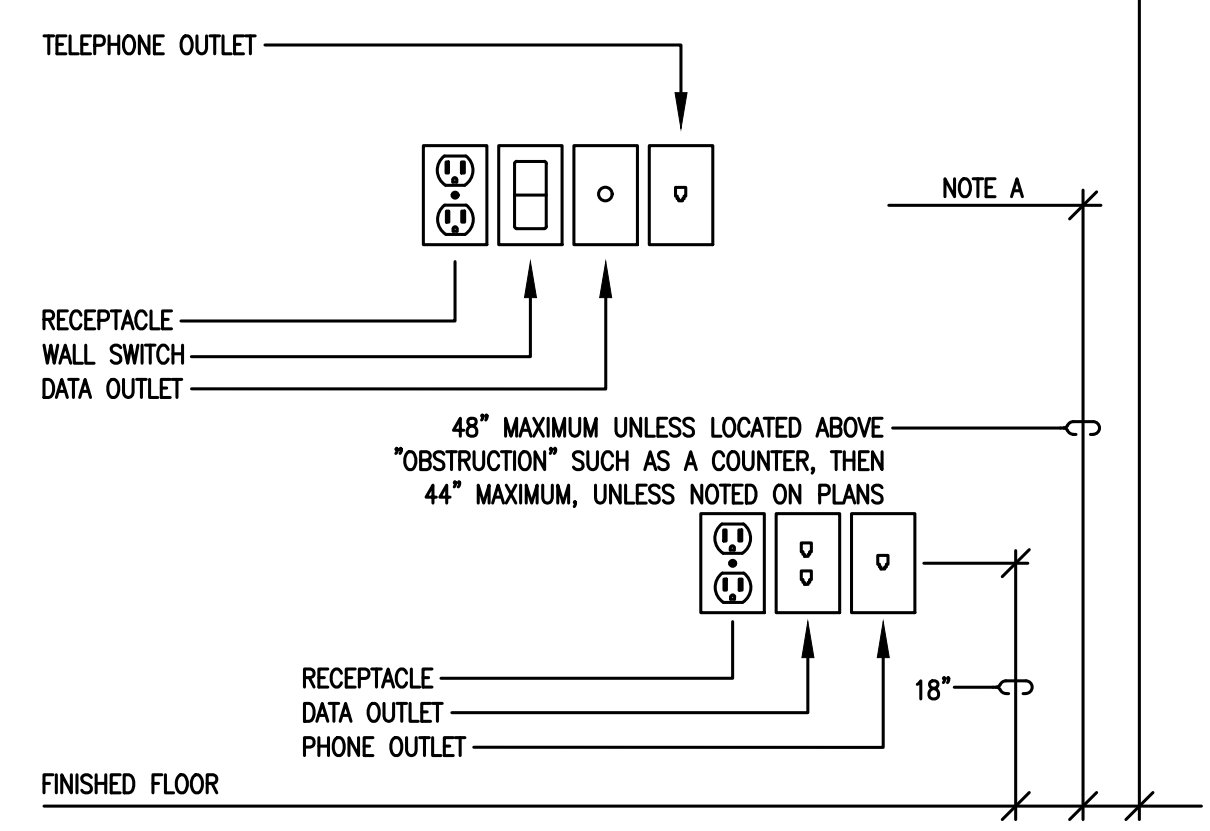




JUNCTION BOX GROUNDING DETAIL  
SCALE: NONE

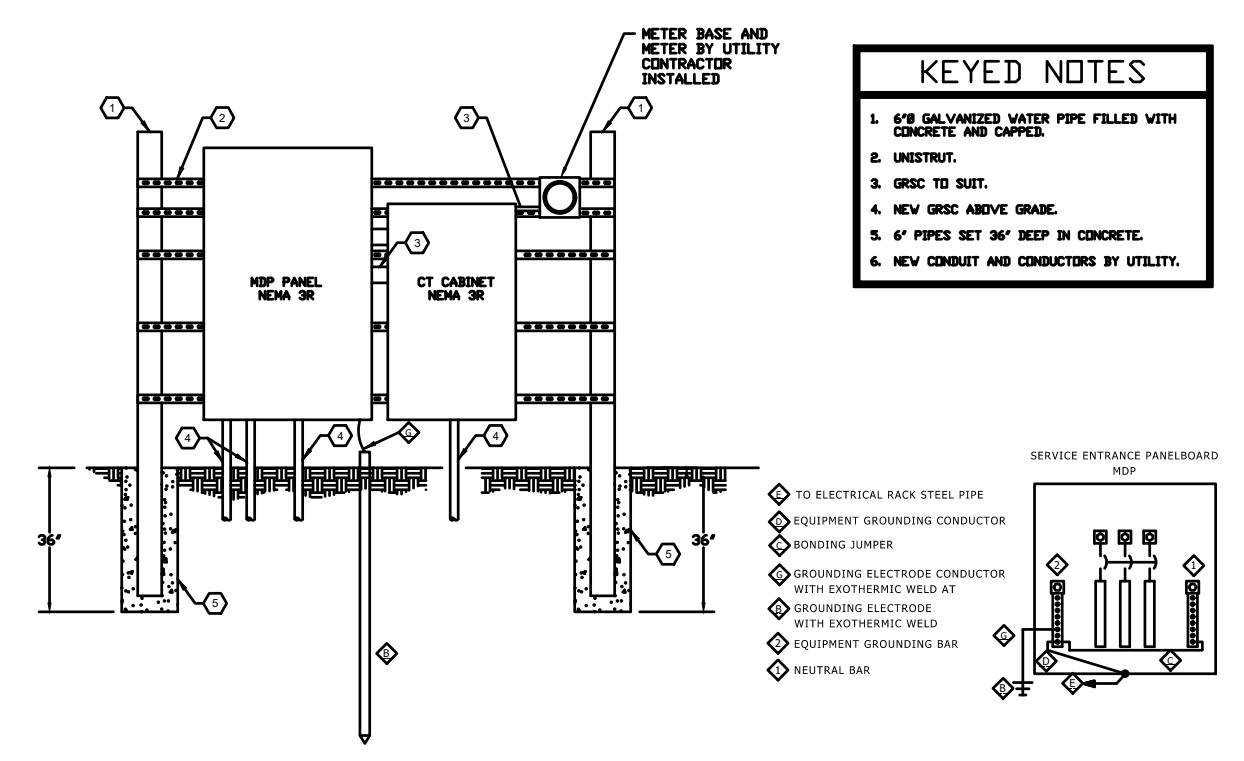
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RTU-1	1300	1300																	
MSP-1	3940	3940																	
MSP-2	3940	3940																	
MSP-3	3940	3940																	
MSP-4	3940	3940																	
MSP-5	3940	3940																	
MSP-6	3940	3940																	
TOTALS	37440	37440																	

PANEL SCHEDULE		LOAD		DESCRIPTION												LOAD		DESCRIPTION	
Panel Name	225	A	B	DESCRIPTION	A	B	DESCRIPTION	A	B	DESCRIPTION	A	B	DESCRIPTION	A	B	DESCRIPTION	A	B	
RESTROOM LIGHTING	400																		
BRIDE BIN ENTRY LIGHTING	250																		
RESTROOM ENTRY LIGHTING	300																		
CHANDLIER	1500																		
SPARE																			
TELEPHONE TERM BOARD	1500																		
KITCHEN AC RECEPTACLE	1500																		
KITCHEN AC RECEPTACLE	1500																		
WEST QUAD	800																		
WEST QUAD	400																		
SWC	500																		
CORRIDOR RECEPTABLES	800																		
BRIDE ROOM RECEPTACLE	200																		
BRIDE ROOM RECEPTACLE	200																		
BRIDE ROOM RECEPTACLE	200																		
WALL	2000																		
SPARE																			
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TOTALS	3900	8150																	

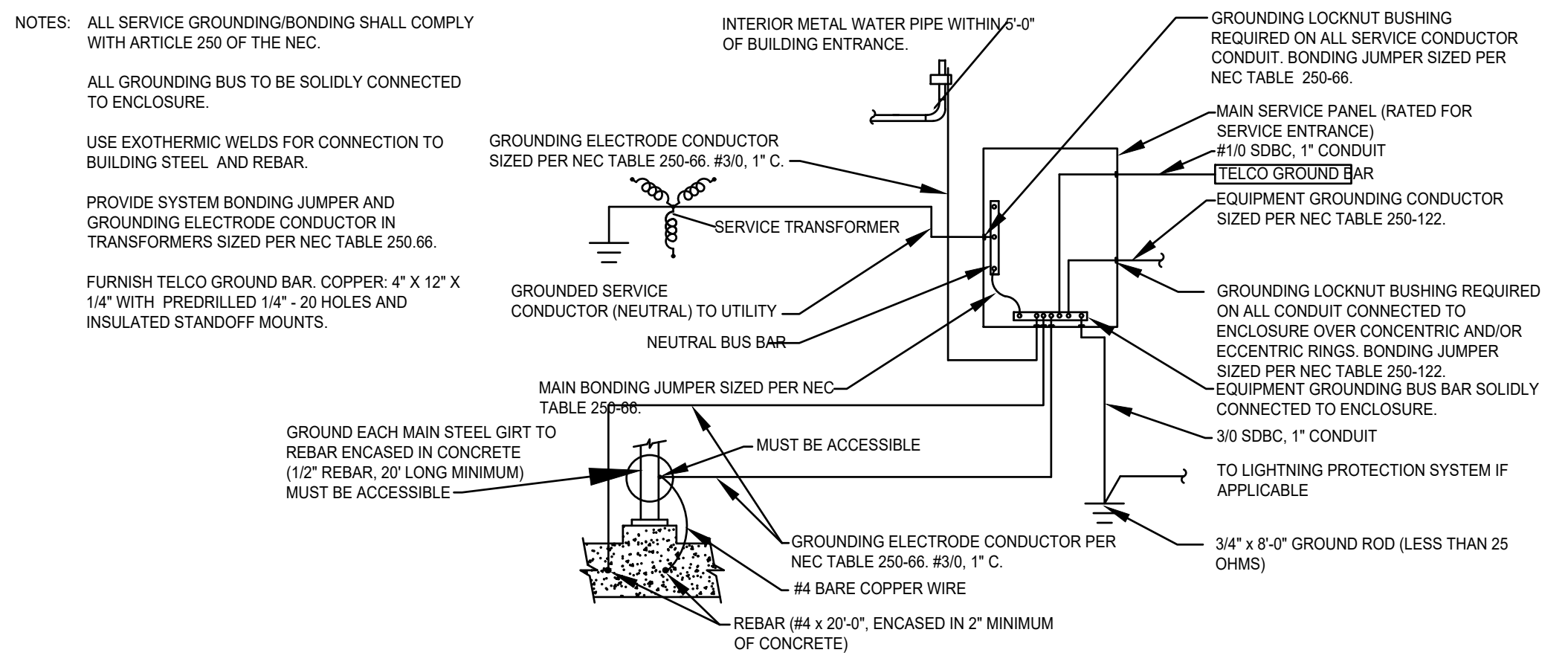


DEVICE MOUNTING HEIGHTS  
SCALE: NONE

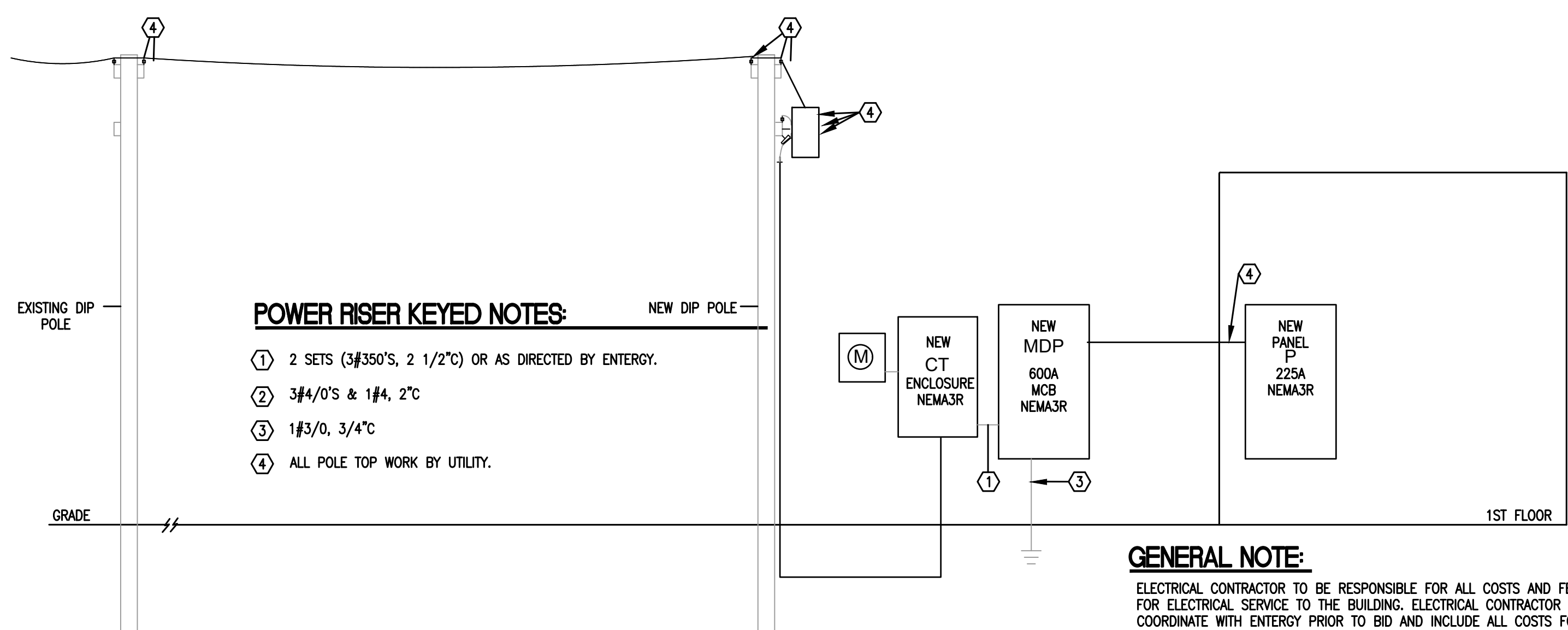
LIGHT FIXTURE SCHEDULE						
TYPE	MANUFACTURER	MODEL	VOLTAGE	LAMP	MOUNTING	NOTES
A1	WAC LIGHTING	SZCP12-FINISH WITH SCPS-FINISH, SZCSR-4-FINISH, AND SZCP9-EC-FINISH	120	NA	SURFACE	TRACK SYSTEM LENGTH AS INDICATED ON THE PLANS. PROVIDE ALL FITTINGS AND ACCESSORIES FOR A COMPLETE INSTALLATION.
A2	WAC LIGHTING	SZS8-1-935-FINISH	120	LED	TRACK	TRACK HEAD
A3	WAC LIGHTING	SZS8-1-935-FINISH AND SZCP10-8000-Z-BK	120	LED	TRACK	TRACK HEAD
B	VERSALED	REL-6-EN-24W-120B-SCT	UNV	LED	RECESSED	12" SQUARE RECESSED DOWNLIGHT
BE	VERSALED	REL-6-EN-24W-120B-SCT	UNV	LED	RECESSED	12" SQUARE RECESSED DOWNLIGHT WITH EM BATTERY
C2	VERSALED	ST-2XLSL-OT	UNV	LED	SURFACE	2FT LED STRIP MOUNT ABOVE DOOR
C3B	VERSALED	ST-2XLSL-OT-4BLEED	UNV	LED	SURFACE	2FT LED STRIP MOUNT ABOVE DOOR W/EM BATTERY
C4	VERSALED	ST-4XSL-OT	UNV	LED	SURFACE	4FT LED STRIP
C5	VERSALED	MELSS-NX-48-1100-35K-HFA-19-U	UNV	LED	RECESSED	4" RECESSED LINEAR
FE	MERCURY LIGHTING	MELSS-NX-48-1100-35K-HFA-19-U-EM12	UNV	LED	RECESSED	4" RECESSED LINEAR W/EM BATTERY
G	VERSALED	ST11-S-6X248-CT-55K-CBA	UNV	LED	SURFACE	8FT LOW PROFILE STRIP
HE	LITOPRA	CUBES-CW-3-D14L-3K-SL-UNV-1SE-5TB-CBA-EM8	UNV	LED	RECESSED	ARCHITECTURAL LINEAR
K	SSL	SSC10-17-SFM-UNV-255-95L-CBA-66-LD	UNV	LED	PENDANT	SWIVEL MOUNT CANOPY PENDANT
KE	SSL	SSC10-17-SFM-UNV-255-95L-CBA-66-LD-BBU	UNV	LED	PENDANT	SWIVEL MOUNT CANOPY PENDANT W/EM BATTERY
L	PREMIER	ASU-G8-RNG1-160-ADR-26-000L-XX	UNV	LED	PENDANT	CHANDLIER
EG	HELP	OMEL-10W-2M-20-SD WITH SW-SD SWITCH	UNV	LED	WALL	EMERGENCY EGRESS LIGHT
EM	HELP	OMEL-4-LED-SD	UNV	LED	WALL	EMERGENCY LIGHT
EN	HELP	EDK-TRC-EM-SD	UNV	LED	UNV	UNIVERSAL MOUNT HEDGE LIT EXIT SIGN



UNISTRUT DIAGRAM  
SCALE: NONE

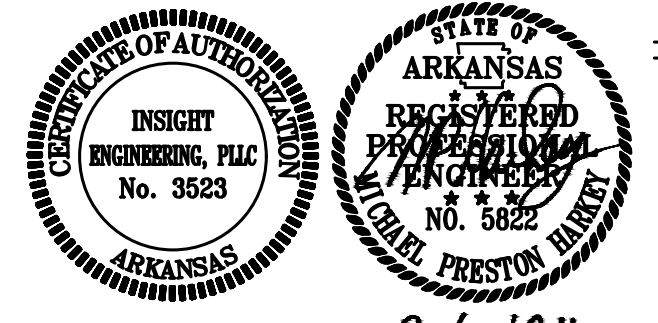


SERVICE GROUND DETAIL  
SCALE: NONE



- POWER RISER KEYED NOTES:**
- 2 SETS (3#350'S, 2 1/2" C) OR AS DIRECTED BY ENERGY.
  - 3#4/0'S & 1#4, 2" C
  - 1#3/0, 3/4" C
  - ALL POLE TOP WORK BY UTILITY.

**GENERAL NOTE:**  
ELECTRICAL CONTRACTOR TO BE RESPONSIBLE FOR ALL COSTS AND FEES FOR ELECTRICAL SERVICE TO THE BUILDING. ELECTRICAL CONTRACTOR TO COORDINATE WITH ENERGY PRIOR TO BID AND INCLUDE ALL COSTS FOR TEMPORARY AND PERMANENT ELECTRICAL SERVICE TO THE BUILDING.



3/1/24

# HVAC LEGEND

ABBREVIATION OR SYMBOL	DESCRIPTION	ABBREVIATION OR SYMBOL	DESCRIPTION	ABBREVIATION OR SYMBOL	DESCRIPTION
AHU	AIR HANDLING UNIT		CEILING SUPPLY DIFFUSER		NEW EQUIPMENT
AFF	ABOVE FINISHED FLOOR ACCESS PANEL		CEILING RETURN/EXHAUST GRILLE		EXISTING EQUIPMENT TO REMAIN
AP	BRAKE HORSEPOWER		GRILLE OR REGISTER ON BOTTOM OF DUCTWORK		EXISTING EQUIPMENT TO BE REMOVED
BHP	BRITISH THERMAL UNIT PER HOUR		NEW DUCT		
BTUH	CUBIC FEET PER MINUTE		EXISTING DUCT TO REMAIN		
CFM	COMPUTER ROOM AIR CONDITIONING UNIT DRAIN		DEMOLISH EXISTING DUCT BACK TO POINT		
CRAC	DRY BULB TEMPERATURE		CONNECT TO EXISTING DUCT		
D	DOWN				
DB	EXHAUST AIR				
DN	ENTERING AIR TEMPERATURE OF THE COIL				
EA	EXTERNAL STATIC PRESSURE				
EAT	ENTERING WATER TEMPERATURE				
ESP	FAN COIL UNIT FLOOR				
EWT	FEET PER MINUTE (VELOCITY)				
FCU	GALLONS PER MINUTE				
FLR	HORSEPOWER				
FO	KILOWATT				
FPM	LEAVING AIR TEMPERATURE OF THE COIL				
GPM	LEAVING WATER TEMPERATURE				
HP	MAKE-UP AIR UNIT				
KW	MAXIMUM				
LAT	MINIMUM				
LWT	MOTOR HORSEPOWER				
MAU	NOT TO SCALE				
MAX	OUTSIDE AIR				
MIN	POUNDS PER SQUARE INCH				
MHP	RETURN AIR				
NTS	RELATIVE HUMIDITY				
O/S	ROTATION PER MINUTE				
PSI	ROOF TOP (AIR CONDITIONING) UNIT				
RA	SUPPLY AIR				
RH	STATIC PRESSURE				
RPM	TYPICAL				
RTU	VARIABLE AIR VOLUME				
SA	WET BULB TEMPERATURE				
SP	TRANSFER AIR				
TYP	FEET				
VAV	INCHES				
WB	ROUND DUCT				
XFR	OVAL DUCT				
"					
ø					
φ					

DETAIL/SECTION NUMBER	DETAIL/SECTION DESIGNATION
	DETAIL/SECTION DESIGNATION
	SHEET NUMBER
	THERMOSTAT OR SENSOR. (SUBSCRIPT DESIGNATES CONTROLLED EQUIPMENT)
	KEYED NOTE

ABBREVIATION OR SYMBOL	DESCRIPTION
	(1) FIRE DAMPER
	(2) SMOKE DAMPER
	(3) MOTORIZED DAMPER
	(4) CONTROL DAMPER
	(1) BALANCING DAMPER
	(2) SMOKE DETECTOR
	BALANCING DAMPER, SET TO INDICATED CFM

ABBREVIATION OR SYMBOL	DESCRIPTION
	AIR DEVICE DESIGNATION
	AIR DEVICE "MARK"
	AIRFLOW CFM

\* NOT ALL SYMBOLS MAY APPLY TO THIS PROJECT

## MECHANICAL GENERAL NOTES:

- ALL MECHANICAL WORK SHALL COMPLY WITH ALL LOCAL CODES, DRAWINGS, SPECIFICATIONS, AND AUTHORITIES HAVING JURISDICTION. IF DISCREPANCIES ARE FOUND, THE MOST STRINGENT REQUIREMENT SHALL GOVERN WORK. WHERE INSPECTIONS ARE REQUIRED BY AUTHORITIES HAVING JURISDICTION, WORK MUST NOT BE CONCEALED UNTIL INSPECTIONS AND TESTING ARE COMPLETE AND WORK IS ACCEPTED.
- REFER TO SPECIFICATIONS AND PROJECT MANUAL FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- REFER TO ALL PROJECT DRAWINGS FOR DETAILS OF CONSTRUCTION AND INSTALLATION REQUIREMENTS.
- PRIOR TO BID, CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE REQUIREMENTS OF THESE NOTES AS WELL AS OTHER NOTES SHOWN ON THE CONTRACT DOCUMENTS. THESE DRAWINGS REFLECT A SYSTEM DESIGNED AROUND SPECIFIED REFERENCE PRODUCTS, THE SELECTION OF WHICH HAS INFLUENCED THE DESIGNS OF OTHER TRADES. IF SUBSTITUTE MANUFACTURERS, SIZES, OR MODEL NUMBERS ARE BID OR SUBMITTED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL DIFFERENCES PRIOR TO BID. ALL COSTS OF ALL TRADES ASSOCIATED WITH THE SUBSTITUTION SHALL BE INCLUDED IN THE BID.
- COORDINATION OF ALL MODIFICATIONS TO EACH DISCIPLINE WHICH RESULT FROM SUBSTITUTION OF EQUIPMENT OR MATERIALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SUBSTITUTIONS WHICH ARE INSTALLED AND SUBSEQUENTLY ARE PROVEN UNSATISFACTORY BY OWNER AND/OR ENGINEER WITHIN THE WARRANTY PERIOD, SHALL BE REMOVED COMPLETELY BY THE CONTRACTOR AND REPLACED WITH THE ORIGINAL DESIGN OR CORRECTED AS DIRECTED BY THE ENGINEER WITHOUT ADDITIONAL COST TO THE OWNER.
- ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRICAL RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, SEQUENCE, DEVICE, OPTION, FITTING, OR COMPONENT.
- INFORMATION AND COMPONENTS ON DETAILS OR IN SPECIFICATIONS, BUT NOT SHOWN ON PLANS, AND VICE VERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH.
- CONTRACTOR SHALL NOT SCALE DRAWINGS. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY THE CONTRACT DOCUMENTS.
- EXACT LOCATIONS OF ALL EQUIPMENT, ROOF CURBS, DUCTS, DIFFUSERS, AND PIPING SHALL BE COORDINATED WITH OTHER TRADES. CEILING MOUNTED SPRINKLER, LIGHTING, AND ELECTRICAL REQUIREMENTS TAKE PRECEDENCE OVER CEILING MOUNTED MECHANICAL REQUIREMENTS. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING GRID AND LIGHTING LAYOUT FOR COORDINATION OF FINAL DIFFUSER LOCATIONS.
- SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR BUILDING DETAILS AND DIMENSIONS. COORDINATE PLACEMENT OF MECHANICAL SYSTEMS WITH ARCHITECTURAL AND STRUCTURAL TRADES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH THAT OF OTHER TRADES. REFER TO ALL CONSTRUCTION DOCUMENTS FOR COMPLETE INFORMATION PRIOR TO BID.
- ALL MECHANICAL CONSTRUCTION DETAILS SHALL BE AS SHOWN AND AS REQUIRED TO MAINTAIN "UL" ASSEMBLY RATINGS AS SHOWN ON ARCHITECTURAL SHEETS. SEAL AROUND ALL PENETRATIONS THROUGH UL RATED ASSEMBLIES, FIRE AND SMOKE WALLS. COORDINATE WITH GENERAL CONTRACTOR.
- NO OTHER TRADES, I.E., ELECTRICAL, CEILING, PLUMBING, OR OTHER SYSTEMS SHALL BE SUSPENDED, HUNG, OR SUPPORTED FROM DUCTWORK OR PIPING.
- SPECIAL CARE SHALL BE TAKEN ON ROOFS TO PREVENT DAMAGE. ANY DAMAGE SHALL BE PROMPTLY REPAIRED AT NO EXPENSE TO THE OWNER. COMPLY WITH BONDING REQUIREMENTS OF ROOF.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FLASHING AND SEALING OF ALL ROOF PENETRATIONS AIR AND WATER TIGHT.
- CLOSELY COORDINATE FINAL LOCATIONS OF INSTALLED EQUIPMENT TO ACHIEVE THE GREATEST ACCESSIBILITY FOR MAINTENANCE PURPOSES.
- CONTRACTOR SHALL VISIT THE SITE TO ESTABLISH THE EXISTING CONDITIONS PRIOR TO DUCT, PIPE OR EQUIPMENT FABRICATION. SYSTEMS SHALL BE ERECTED USING FIELD MEASUREMENTS FOR COORDINATION WITH THE EXISTING EQUIPMENT, STRUCTURE, FIRE PROTECTION AND ELECTRICAL IN THE SPACE.
- MAINTAIN THE SECURITY OF THE BUILDING AT ALL TIMES.
- CORE DRILL ALL PIPING PENETRATIONS OF CONCRETE WALLS AND FLOORS.
- ALL HVAC WORK TO BE PER SHACMA AND ALL APPLICABLE CODES. DUCT SIZES REPRESENT FREE AREA.
- ALL LOW PRESSURE DUCTWORK THAT HAS TO BE OFFSET DUE TO AN OBSTRUCTION SHALL BE OFFSET WITH TWO - 45 DEGREE, 1.5 RADIUS ELBOWS UNLESS OTHERWISE NOTED.
- PROVIDE ACCESS DOORS IN WALLS, FLOORS, OR CEILINGS FOR ACCESS TO ALL FIRE DAMPERS, SMOKE DAMPERS, EQUIPMENT, COILS, VALVES, AND BALANCING DAMPERS. ACCESS DOORS ARE NOT REQUIRED WHERE DEVICES ARE DIRECTLY ACCESSIBLE THROUGH AIR DEVICES.
- PROVIDE FIRE, SMOKE, AND COMBINATION FIRE AND SMOKE DAMPERS IN ALL DUCT PENETRATIONS OF RATED WALLS ACCORDING TO THE FOLLOWING SCHEDULE: 1 HOUR FIRE WALL - PROVIDE FIRE DAMPER IN ALL DUCTS WITH FREE AREA GREATER THAN 100 SQUARE INCHES; 2 HOUR FIRE WALL - PROVIDE FIRE DAMPER; 2 HOUR SMOKE WALL - PROVIDE SMOKE DAMPER; 2 HOUR FIRE AND SMOKE WALL - PROVIDE COMBINATION FIRE AND SMOKE DAMPER
- DUCT FITTINGS ARE AS FOLLOWS: 1) FLEX DUCT IS ONLY PERMITTED IN LINEAR DUCT RUNS. FLEX DUCT SHALL NOT BE USED WHERE DUCTWORK CHANGES DIRECTION. ALL ELBOWS SHALL BE HARD DUCTED. 2) ALL 90 DEGREE ELBOWS TO HAVE R/D = 1.5, UNLESS OTHERWISE NOTED. 3) ALL MITERED RECTANGULAR ELBOWS GREATER THAN 90 DEGREES NOTED ARE TO HAVE TURNING VANES. 4) SIDE TAKE-OFF FITTINGS SHALL BE EQUAL TO FLEXMASTER STODB03. 5) DAMPERS SHALL BE EQUAL TO FLEXMASTER SLDB03
- PROVIDE BRANCH TAKEOFF AND DAMPER AT EACH CONNECTION OF ROUND OR RECTANGULAR ROUND OR RECTANGULAR BRANCH DUCTS TO A RECTANGULAR DUCT, SEE DETAILS.
- REFER TO ARCHITECTURAL PLANS FOR LOCATION OF FIRE AND SMOKE WALLS.
- MAINTAIN A MINIMUM OF 10'-0" BETWEEN ALL FRESH AIR INTAKES AND PLUMBING VENTS, EXHAUST FAN DISCHARGE, AND FLUES. MAINTAIN MINIMUM CLEAR DISTANCE OF 5'0" BETWEEN PARAPET WALL AND ALL ROOF MOUNTED MECHANICAL EQUIPMENT.
- ALL ROOF MOUNTED EQUIPMENT SHALL BE PROVIDED WITH MANUFACTURER'S FABRICATED CURBS WHICH FACILITATE LEVEL MOUNTING OF THE EQUIPMENT (I.E. FACTORY FABRICATED TO COMPENSATE FOR ROOF SLOPE). OBTAIN ROOF SLOPES AND DIRECTION OF SLOPE FROM ARCHITECTURAL AND/OR STRUCTURAL PLANS. ALL ROOF CURBS SHALL BE A MINIMUM OF 8" HIGH. SHIMMING OF CURBS IS NOT ACCEPTABLE.
- ROOF PENETRATIONS AND FLASHING OR SEALING MUST COMPLY WITH ROOF MANUFACTURER'S RECOMMENDATIONS AND WARRANTY REQUIREMENTS.
- ALL DUCTS SHALL BE MOUNTED HIGH AS POSSIBLE AGAINST BOTTOM OF STRUCTURE EXCEPT AS REQUIRED TO AVOID CONFLICTS WITH INTERSECTING SYSTEMS. DIAGONALLY OFFSET DUCTS IMMEDIATELY BEFORE AND AFTER PASSING UNDER INTERSECTING SYSTEMS TO MAINTAIN DUCT TIGHT TO STRUCTURE.
- CONTRACTOR SHALL FIELD VERIFY ALL PIPE ROUTING AND ADJUST ELEVATIONS AS REQUIRED TO AVOID CONFLICTS. FINAL PLACEMENT OF PIPING SHALL BE DETERMINED BY FIELD MEASUREMENT AND VERIFICATION. ELEVATIONS ARE REFERENCED TO PIPE CENTERLINE UNLESS OTHERWISE NOTED.
- DUCTWORK SHALL CONFORM TO THE FOLLOWING PRESSURE CLASSES: SUPPLY: 2" SP; RETURN/RELIEF/OUTSIDE AIR/EXHAUST: 2" SP. ALL DUCTWORK IS REQUIRED TO BE TESTED IN ACCORDANCE WITH THE SPECIFICATIONS.
- ALL EQUIPMENT, DEVICES, AND FIXTURES SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.
- CONTRACTOR SHALL VERIFY CLOSELY AT SITE TRANSPORTATION OF NEW HVAC EQUIPMENT INTO MECHANICAL AREAS BEFORE BIDDING. PROVIDE COMPLETE DISASSEMBLY AND RE-ASSEMBLY OF NEW EQUIPMENT AS REQUIRED FOR A COMPLETE INSTALLATION.
- PROVIDE FLEXIBLE CONNECTIONS AND TRANSITIONS ON DUCT INLET AND OUTLET CONNECTIONS TO ALL EQUIPMENT WITH MOVING PARTS.
- DUCTWORK VISIBLE THROUGH RETURN AIR OPENINGS SHALL BE PAINTED FLAT BLACK TO REDUCE VISIBILITY.
- EXPOSED DUCTWORK AND PIPING SHALL BE FURNISHED SUITABLE FOR PAINTING, AND SHALL BE PAINTED AS REQUIRED BY ARCHITECTURAL SPECIFICATIONS.
- NOT ALL REQUIRED PIPING, VALVES, OR FITTINGS ARE SHOWN ON DRAWINGS FOR CLARITY. COORDINATE PLAN DETAILS WITH SPECIFICATIONS, SCHEMATICS, FLOW DIAGRAMS, AND OTHER DETAILS TO PROVIDE COMPLETE PIPING SYSTEMS.
- COORDINATE WORK CLOSELY WITH CONTROL REQUIREMENTS. PROVIDE ALL NECESSARY DUCT TAPS, PIPE TAPS, WELLS, AND OTHER APPURTENANCES REQUIRED BY CONTROL SYSTEM. PROVIDE SPARE PIPE WELL ADJACENT TO EACH TEMPERATURE SENSOR IN PIPING.
- REFER TO ARCHITECTURAL PLANS FOR CEILING GRILLE AND DIFFUSER LOCATIONS, FOR CEILING TYPE, AND FOR MOUNTING REQUIREMENTS. CONTRACTOR SHALL PROVIDE AND INSTALL ALL AIR DEVICES WITH MOUNTING SYSTEM DESIGNED FOR MOUNTING SURFACE TYPE.
- COORDINATE FINAL PLACEMENT OF ALL THERMOSTATS WITH WALL-MOUNTED DEVICES AND OWNER'S REPRESENTATIVE. MOUNT PER A.D.A. REQUIREMENTS. ANY THERMOSTAT THAT IS REQUIRED TO BE MOUNTED ON AN EXTERIOR WALL SHALL BE MOUNTED ON AN INSULATED PAD.
- INSTALL SMOKE DETECTOR IN SUPPLY AND RETURN DUCT OF ALL AIR HANDLERS SUPPLYING GREATER THAN 2,000 CFM.
- PROVIDE CONCRETE PADS FOR ALL GROUND MOUNTED EQUIPMENT.
- REPLACE ALL ARCHITECTURAL FEATURES REMOVED OR DAMAGED DURING THE COURSE OF THE WORK.
- CONTRACTOR SHALL PATCH ALL WALLS, FLOORS, AND CEILINGS TO MATCH NEW FOR ALL OPENINGS CREATED BY INSTALLATION OF EQUIPMENT AND HVAC SERVICE PENETRATIONS.
- ALL SUPPLY, RETURN, RELIEF, AND OUTSIDE AIR DUCTWORK SHALL BE EXTERNALLY INSULATED EXCEPT WHERE LINER, DOUBLE WALL LINED DUCT, OR FABRIC DUCT IS INDICATED. INSULATE TOPS OF SUPPLY AIR DIFFUSERS WITH 2" THICK FIBERGLASS DUCT WRAP. DO NOT INSULATE EXHAUST DUCTWORK EXCEPT FOR FIRE WRAP ON KITCHEN HOOD EXHAUST.
- REFER TO SPECIFICATIONS FOR INSULATION AND R-VALUES FOR MECHANICAL PIPING AND DUCTWORK INSULATION.
- SEE ARCHITECTURAL PLANS FOR ROOF PENETRATION DETAILS.
- ALL HVAC COMPONENTS WITH ELECTRICAL REQUIREMENTS SHALL BE INSTALLED WITH ELECTRICAL INFRASTRUCTURE NECESSARY TO PROVIDE A FULLY FUNCTIONING SYSTEM. IF NOT SPECIFICALLY SHOWN ON ELECTRICAL SCHEDULE, HVAC FIXTURES REQUIRING ELECTRICAL SERVICE SHALL BE FED FROM BREAKER OF ADEQUATE CAPACITY.
- ALL CONTROL WIRING SHALL BE INSTALLED IN CONDUIT.
- PLENUM CABLING SHALL HAVE ITS OWN SYSTEM OF SUPPORT AND BE STRUCTURALLY SOUND. ATTACHMENT TO CEILING GRID AND HANGER WIRES IS PROHIBITED. WHERE NOT INSTALLED IN CONDUIT, CABLING SHALL BE RUN IN CABLE HOOKS. CABLING LAYING ON CEILING TILES IS PROHIBITED.
- CONTRACTOR SHALL PROVIDE FURR DOWN AND ANY OTHER CEILING MODIFICATIONS NEEDED TO ACCOMMODATE DUCTWORK PENETRATIONS.
- PROVIDE ALL HVAC UNITS WITH AN EXTRA SET OF MANUFACTURER'S RECOMMENDED FILTERS AFTER PROJECT COMPLETION.

**CONTROL NOTES**

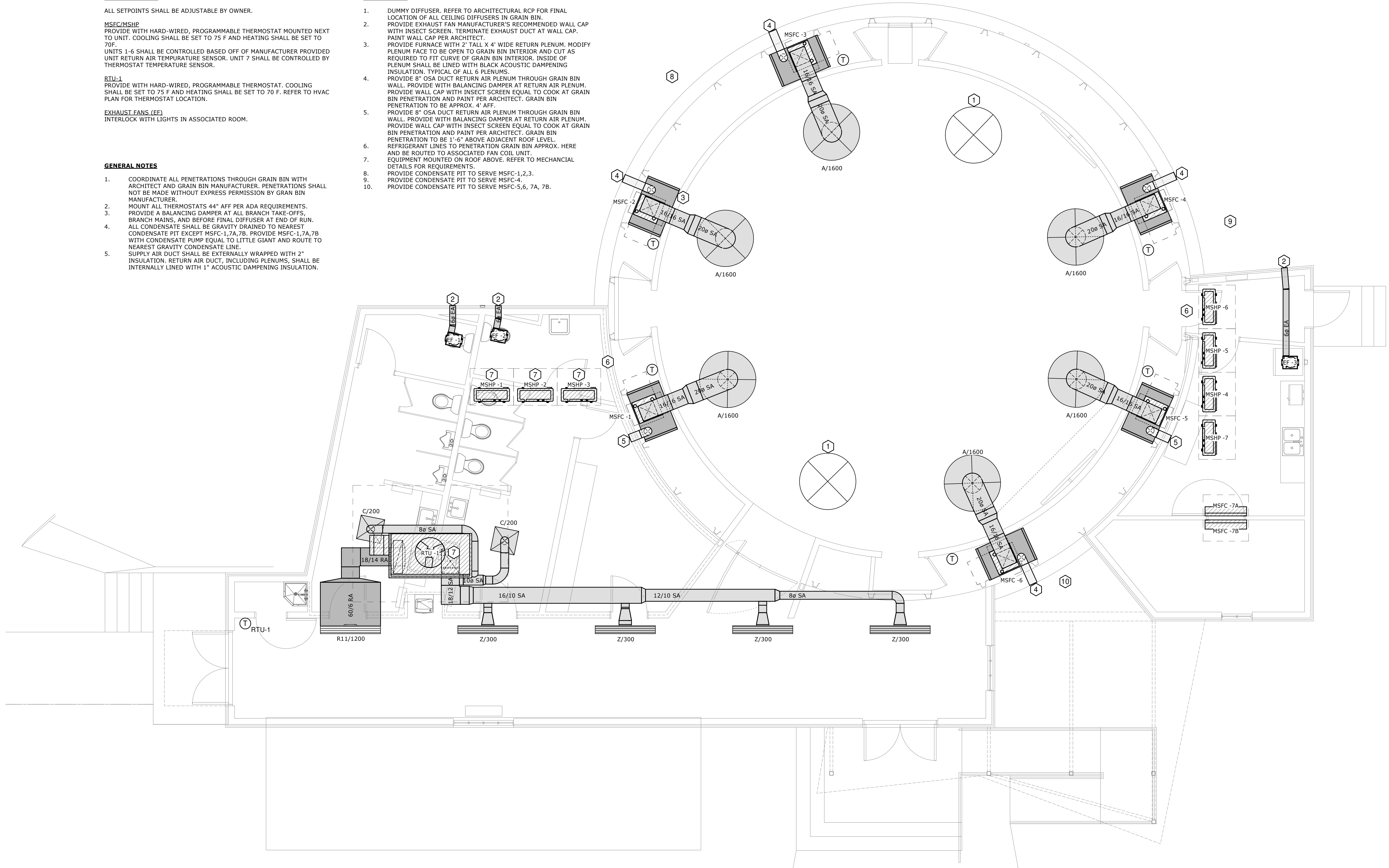
- ALL SETPOINTS SHALL BE ADJUSTABLE BY OWNER.
- MSFC/MSHP**  
 PROVIDE WITH HARD-WIRED, PROGRAMMABLE THERMOSTAT MOUNTED NEXT TO UNIT. COOLING SHALL BE SET TO 75 F AND HEATING SHALL BE SET TO 70 F.  
 UNITS 1-6 SHALL BE CONTROLLED BASED OFF OF MANUFACTURER PROVIDED UNIT RETURN AIR TEMPERATURE SENSOR. UNIT 7 SHALL BE CONTROLLED BY THERMOSTAT TEMPERATURE SENSOR.
- RTU-1**  
 PROVIDE WITH HARD-WIRED, PROGRAMMABLE THERMOSTAT. COOLING SHALL BE SET TO 75 F AND HEATING SHALL BE SET TO 70 F. REFER TO HVAC PLAN FOR THERMOSTAT LOCATION.
- EXHAUST FANS (EF)**  
 INTERLOCK WITH LIGHTS IN ASSOCIATED ROOM.

**GENERAL NOTES**

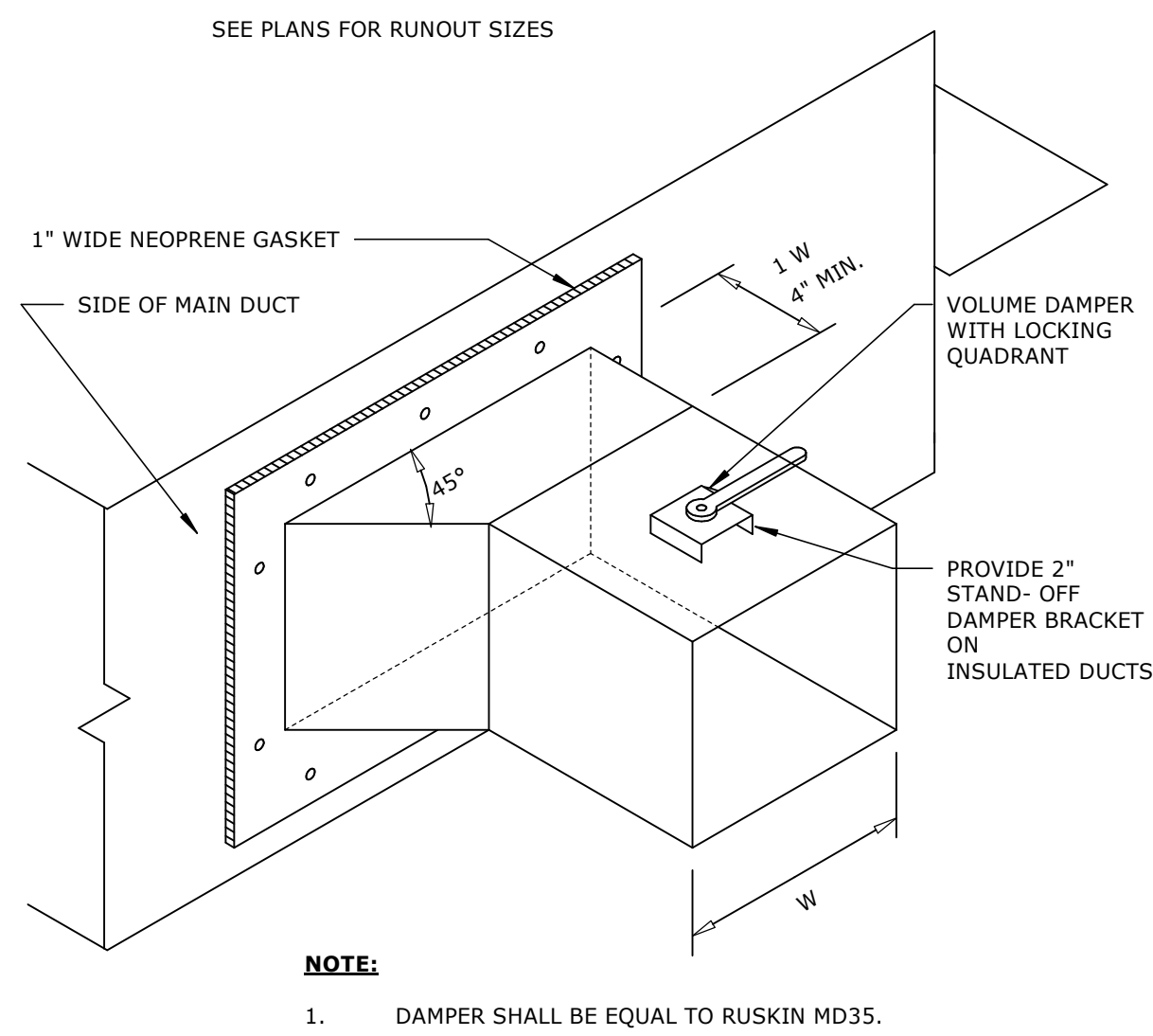
- COORDINATE ALL PENETRATIONS THROUGH GRAIN BIN WITH ARCHITECT AND GRAIN BIN MANUFACTURER. PENETRATIONS SHALL NOT BE MADE WITHOUT EXPRESS PERMISSION BY GRAIN BIN MANUFACTURER.
- MOUNT ALL THERMOSTATS 44" AFF PER ADA REQUIREMENTS.
- PROVIDE A BALANCING DAMPER AT ALL BRANCH TAKE-OFFS, BRANCH MAINS, AND BEFORE FINAL DIFFUSER AT END OF RUN.
- ALL CONDENSATE SHALL BE GRAVITY DRAINED TO NEAREST CONDENSATE PIT EXCEPT MSFC-1,7A,7B. PROVIDE MSFC-1,7A,7B WITH CONDENSATE PUMP EQUAL TO LITTLE GIANT AND ROUTE TO NEAREST GRAVITY CONDENSATE LINE.
- SUPPLY AIR DUCT SHALL BE EXTERNALLY WRAPPED WITH 2" INSULATION. RETURN AIR DUCT, INCLUDING PLENUMS, SHALL BE INTERNALLY LINED WITH 1" ACOUSTIC DAMPENING INSULATION.

**KEYED NOTES**

- DUMMY DIFFUSER. REFER TO ARCHITECTURAL RCP FOR FINAL LOCATION OF ALL CEILING DIFFUSERS IN GRAIN BIN.
- PROVIDE EXHAUST FAN MANUFACTURER'S RECOMMENDED WALL CAP WITH INSECT SCREEN. TERMINATE EXHAUST DUCT AT WALL CAP. PAINT WALL CAP PER ARCHITECT.
- PROVIDE FURNACE WITH 2' TALL X 4' WIDE RETURN PLENUM. MODIFY PLENUM FACE TO BE OPEN TO GRAIN BIN INTERIOR AND CUT AS REQUIRED TO FIT CURVE OF GRAIN BIN INTERIOR. INSIDE OF PLENUM SHALL BE LINED WITH BLACK ACOUSTIC DAMPENING INSULATION. TYPICAL OF ALL 6 PLENUMS.
- PROVIDE 8" OSA DUCT RETURN AIR PLENUM THROUGH GRAIN BIN WALL. PROVIDE WITH BALANCING DAMPER AT RETURN AIR PLENUM. PROVIDE WALL CAP WITH INSECT SCREEN EQUAL TO COOK AT GRAIN BIN PENETRATION AND PAINT PER ARCHITECT. GRAIN BIN PENETRATION TO BE APPROX. 4' AFF.
- PROVIDE 8" OSA DUCT RETURN AIR PLENUM THROUGH GRAIN BIN WALL. PROVIDE WITH BALANCING DAMPER AT RETURN AIR PLENUM. PROVIDE WALL CAP WITH INSECT SCREEN EQUAL TO COOK AT GRAIN BIN PENETRATION AND PAINT PER ARCHITECT. GRAIN BIN PENETRATION TO BE 1'-6" ABOVE ADJACENT ROOF LEVEL.
- REFRIGERANT LINES TO PENETRATION GRAIN BIN APPROX. HERE AND BE ROUTED TO ASSOCIATED FAN COIL UNIT.
- EQUIPMENT MOUNTED ON ROOF ABOVE. REFER TO MECHANICAL DETAILS FOR REQUIREMENTS.
- PROVIDE CONDENSATE PIT TO SERVE MSFC-1,2,3.
- PROVIDE CONDENSATE PIT TO SERVE MSFC-4.
- PROVIDE CONDENSATE PIT TO SERVE MSFC-5,6,7A,7B.

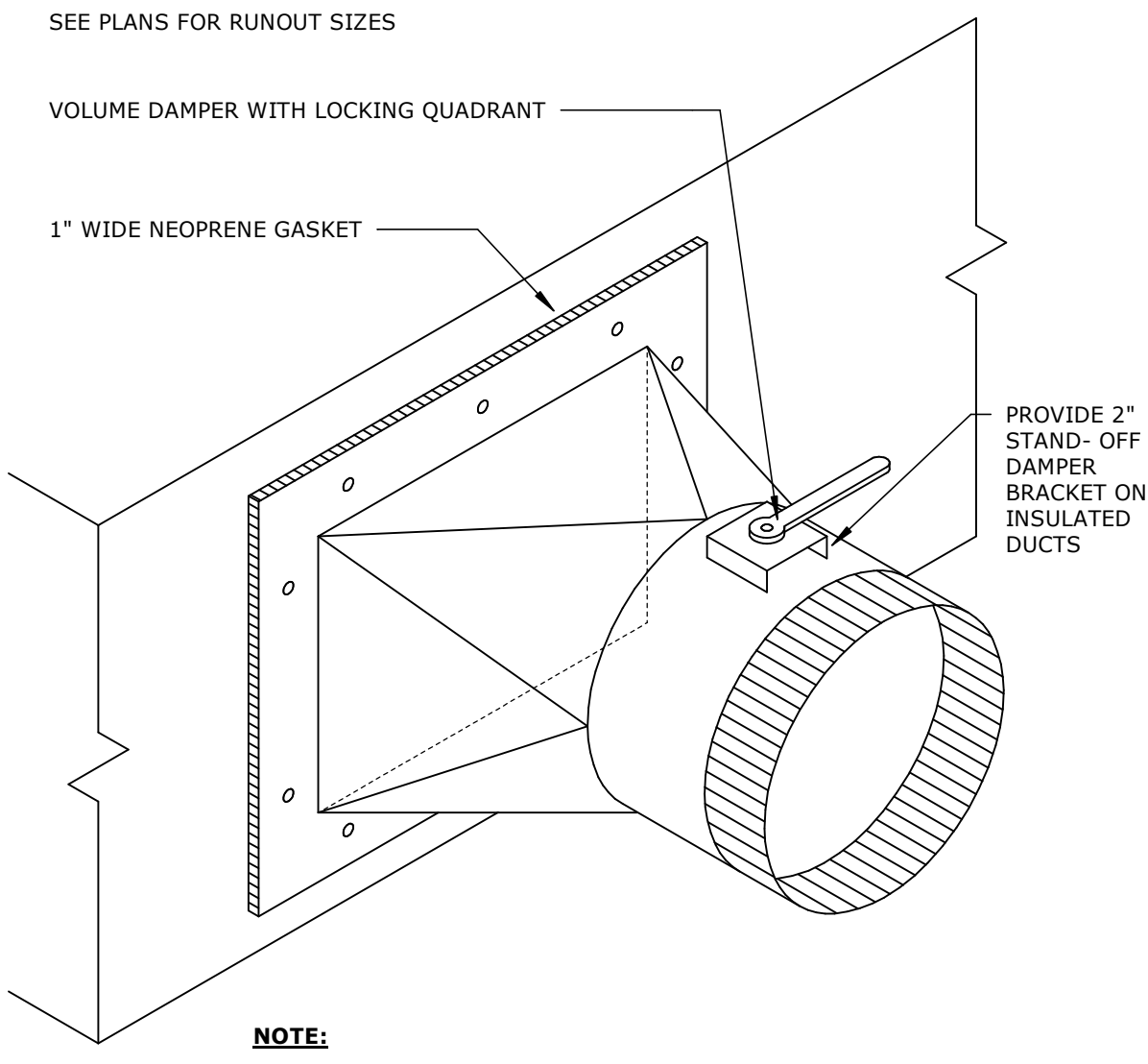


**1 HVAC PLAN**  
 1/4" = 1'-0"



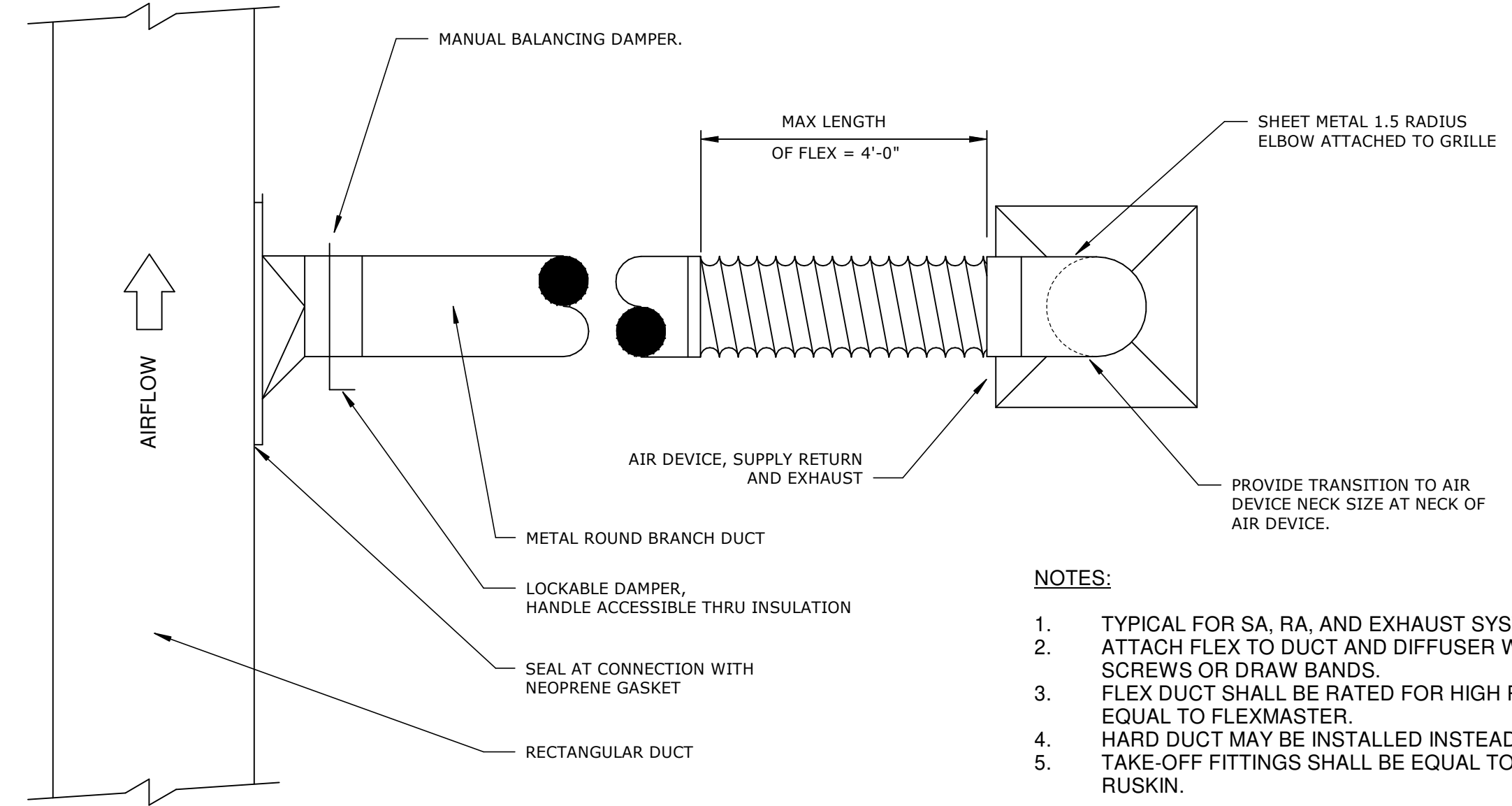
**NOTE:**

1. DAMPER SHALL BE EQUAL TO RUSKIN MD35.



**NOTE:**

1. SIDE TAKE-OFF FITTINGS SHALL BE EQUAL TO FLEXMASTER STOD.



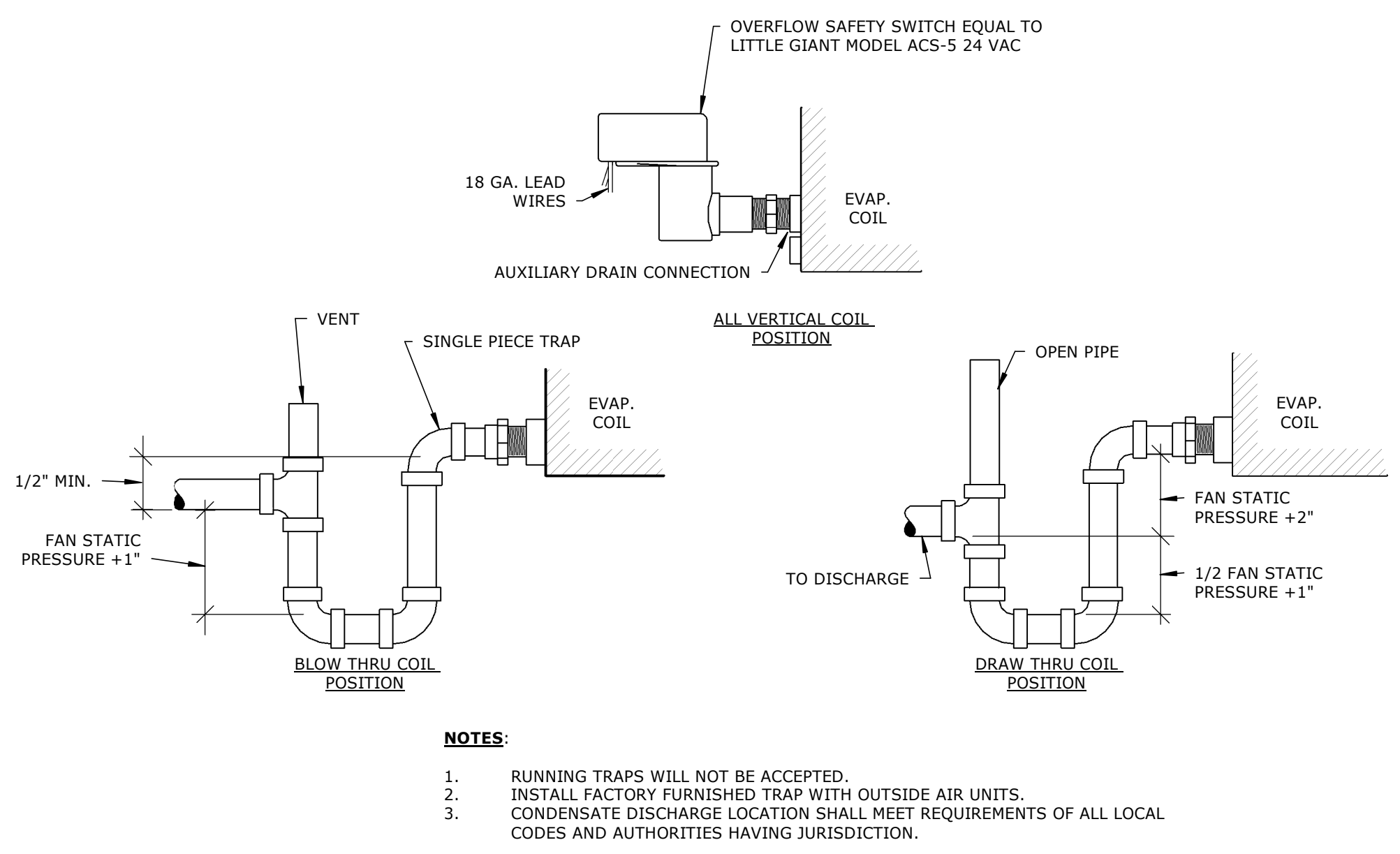
**NOTES:**

1. TYPICAL FOR SA, RA, AND EXHAUST SYSTEMS.
2. ATTACH FLEX TO DUCT AND DIFFUSER WITH SHEET METAL SCREWS OR DRAW BANDS.
3. FLEX DUCT SHALL BE RATED FOR HIGH PRESSURE AND EQUAL TO FLEXMASTER.
4. HARD DUCT MAY BE INSTALLED INSTEAD OF FLEX DUCT.
5. TAKE-OFF FITTINGS SHALL BE EQUAL TO FLEXMASTER OR RUSKIN.

**1 -BRANCH DUCT FITTING-RECTANGULAR**  
NOT TO SCALE

**2 -BRANCH DUCT FITTING-ROUND**  
NOT TO SCALE

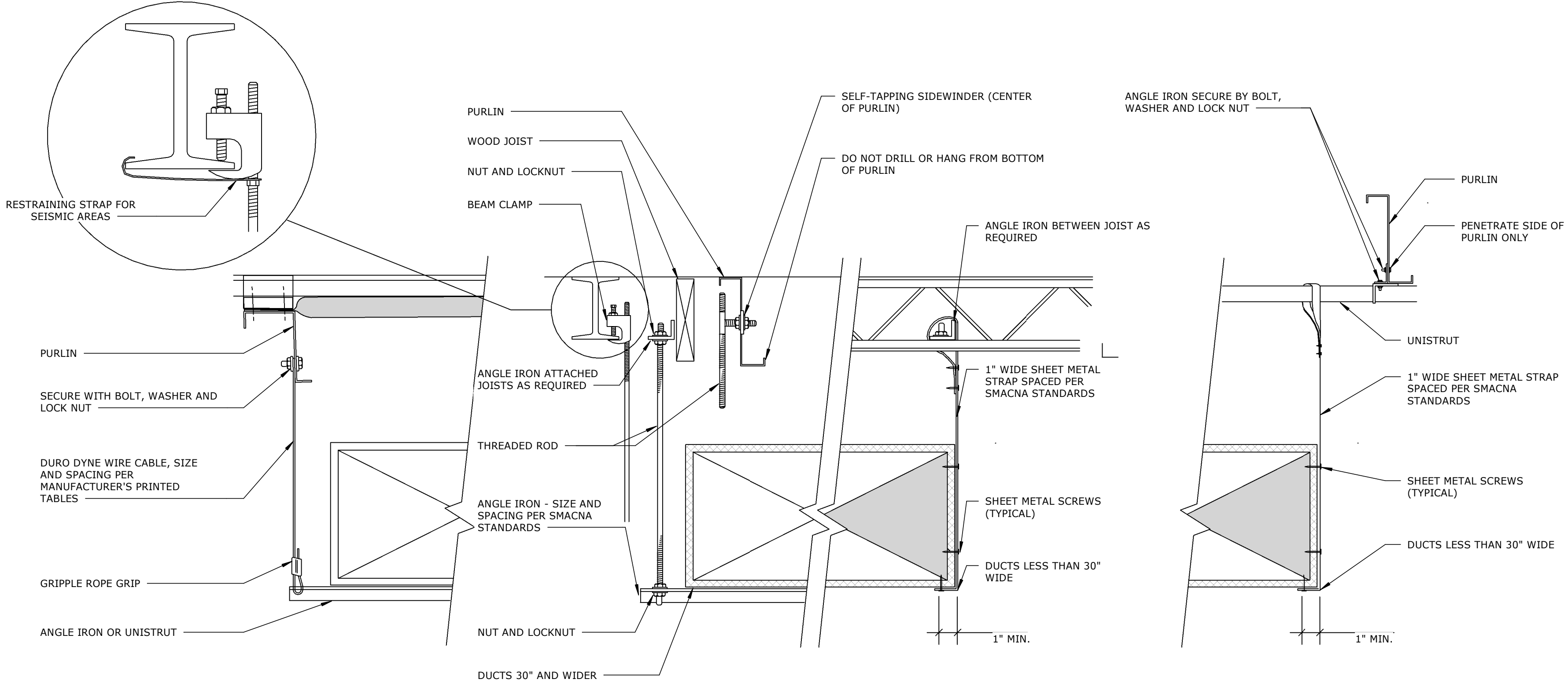
**3 -BRANCH DUCT TAKE OFF**  
NOT TO SCALE



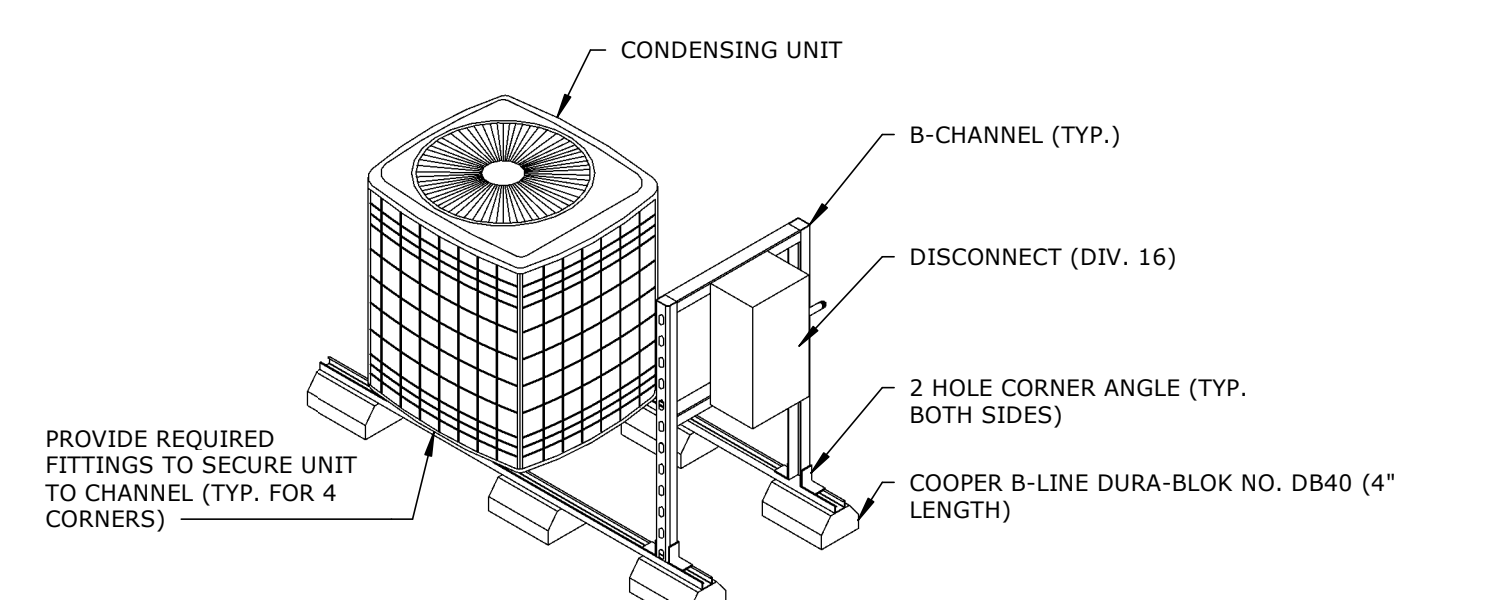
**NOTES:**

1. RUNNING TRAPS WILL NOT BE ACCEPTED.
2. INSTALL FACTORY FURNISHED TRAP WITH OUTSIDE AIR UNITS.
3. CONDENSATE DISCHARGE LOCATION SHALL MEET REQUIREMENTS OF ALL LOCAL CODES AND AUTHORITIES HAVING JURISDICTION.

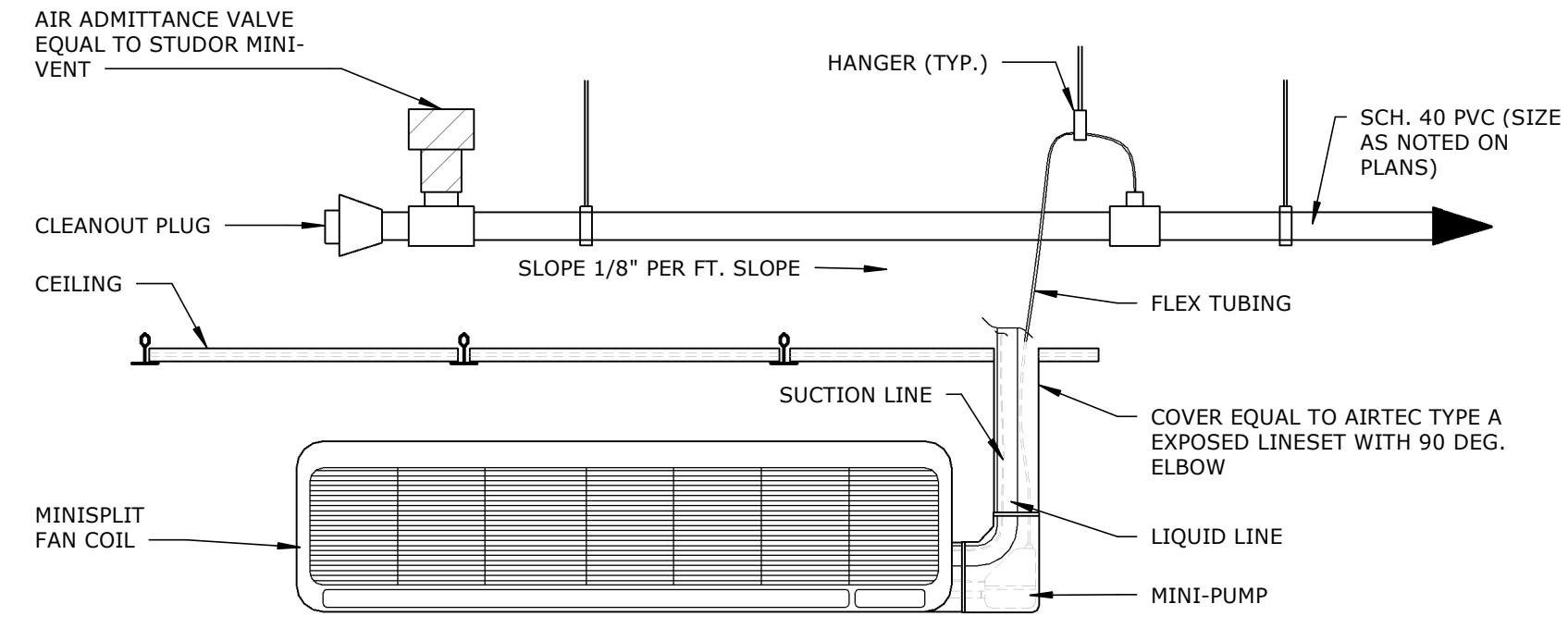
**4 -CONDENSATE TRAP**  
NOT TO SCALE



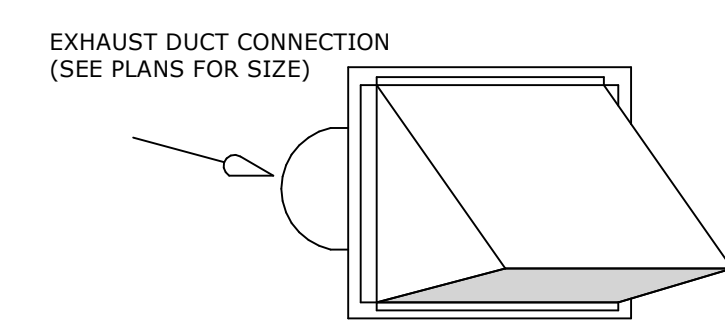
**5 DUCT SUPPORT**  
NOT TO SCALE



**6 -CONDENSER ROOF MOUNTING W/ DISCONNECT**  
NOT TO SCALE



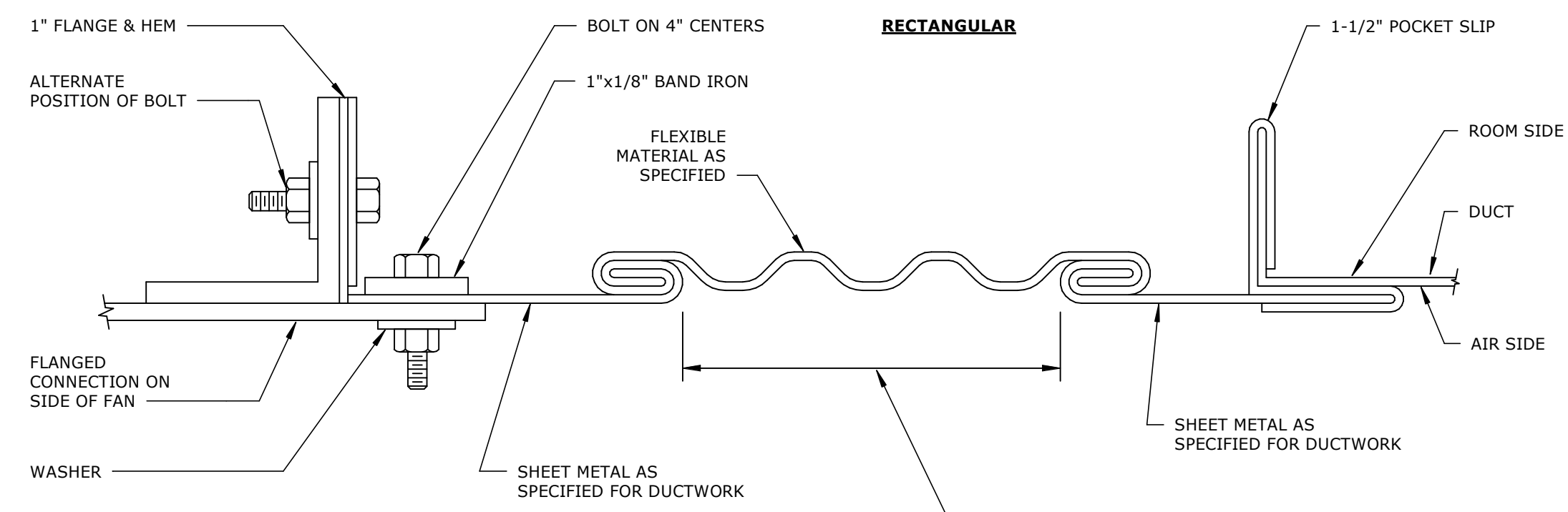
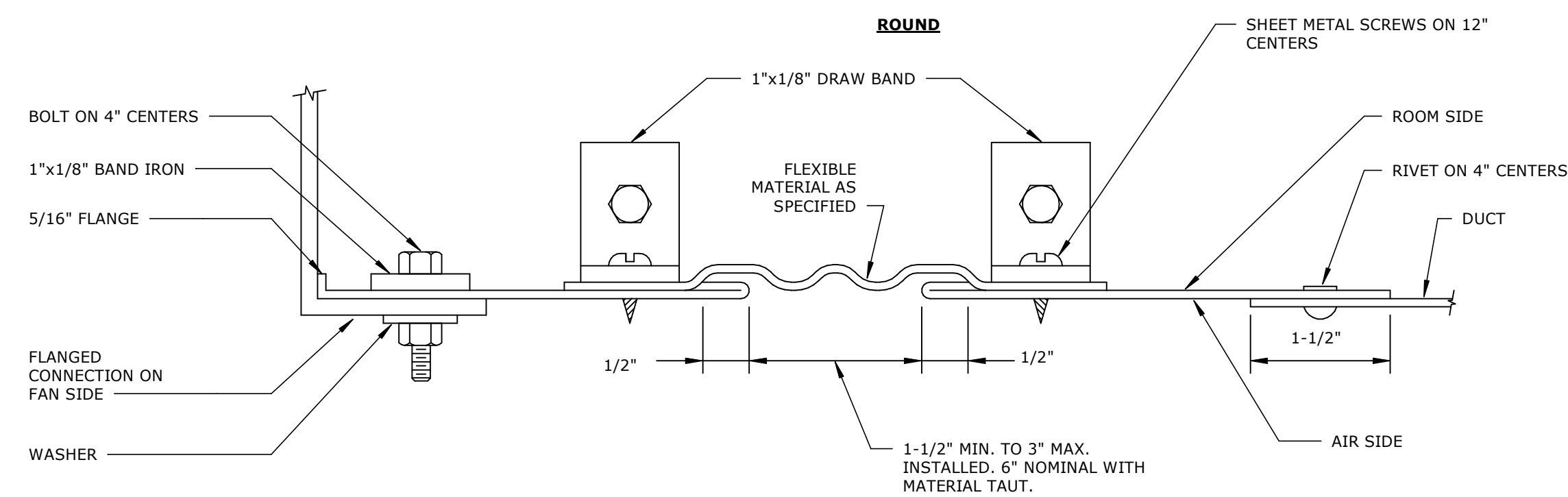
**7 -DUCTLESS WALL MINISPLIT**  
NOT TO SCALE



**NOTES:**

1. COORDINATE WITH ARCHITECT FOR FINAL LOCATION OF ALL PENETRATIONS WITH WALL CAP.
2. WALL CAP SHALL BE EQUAL TO LOREN COOK. FOR USE IN LOW-VOLUME EXHAUST APPLICATIONS (300 CFM OR LESS).
3. WALL CAP SHALL HAVE BIRDSCREEN AND BACKDRAFT DAMPER.
4. PAINT WALL CAP TO MATCH WALL.
5. MAINTAIN ALL CODE REQUIRED CLEARANCES FROM OUTSIDE AIR INTAKES, DOORS, AND OPERABLE WINDOWS.

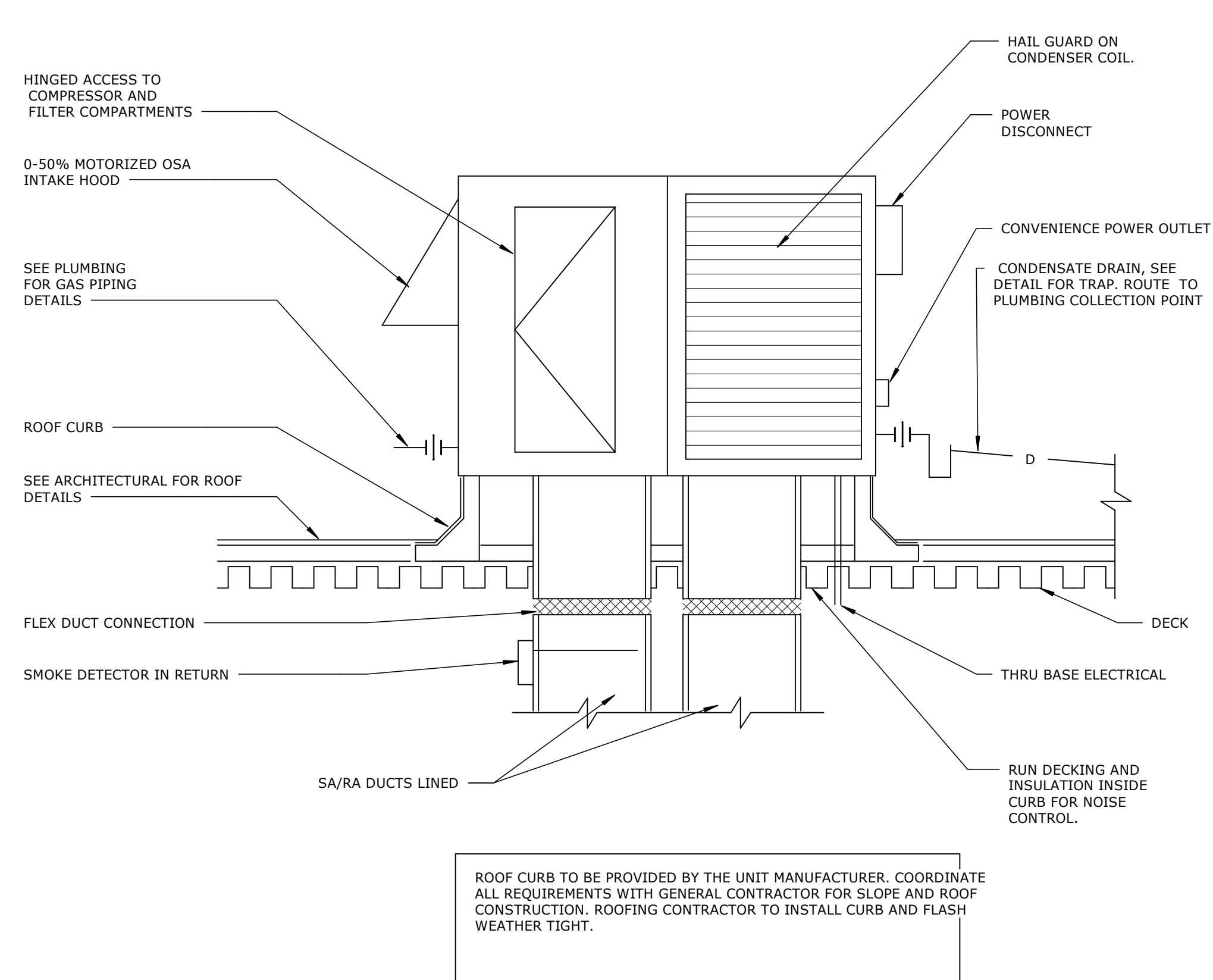
**8 -EXHAUST WALL CAP**  
NOT TO SCALE



**NOTES:**

1. FLEXIBLE CONNECTIONS SHALL BE MADE AT ALL SUPPLY AND RETURN CONNECTIONS OF DUCTWORK TO AIR HANDLING UNITS. ALL CONNECTIONS SHALL BE AS PER SMACNA.

**1 - FLEXIBLE CONNECTION**  
NOT TO SCALE

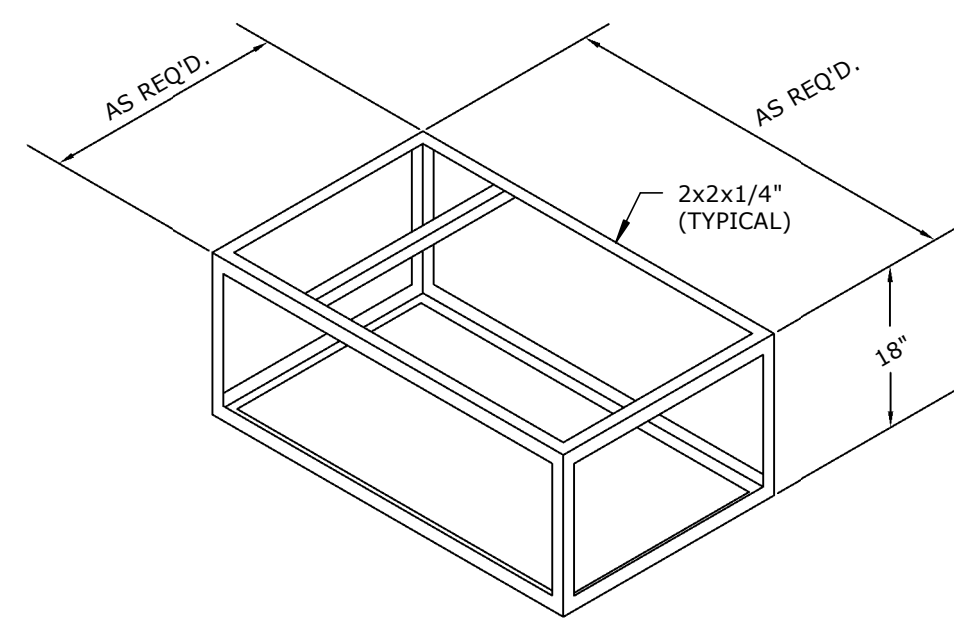


ROOF CURB TO BE PROVIDED BY THE UNIT MANUFACTURER. COORDINATE ALL REQUIREMENTS WITH GENERAL CONTRACTOR FOR SLOPE AND ROOF CONSTRUCTION. ROOFING CONTRACTOR TO INSTALL CURB AND FLASH WEATHER TIGHT.

**DESIGNER NOTES:**

1. VERIFY USE OF LINER.

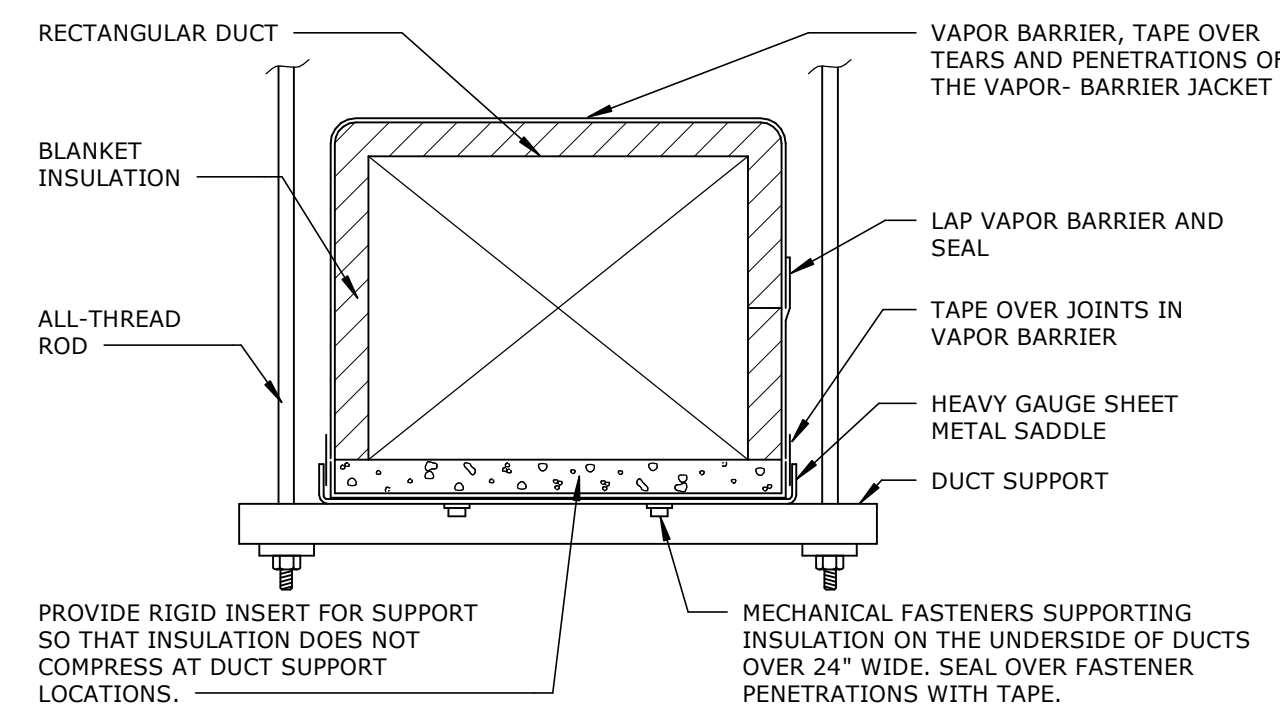
**2 - PACKAGED UNIT - ROOF**  
NOT TO SCALE



**NOTES:**

1. COVER TOP, BOTTOM, AND EXPOSED SIDES WITH 20 GA. SHEET METAL - SEAL JOINTS AIR TIGHT.
2. COVER ALL INTERIOR SURFACES OF PLENUM WITH 1\"/>

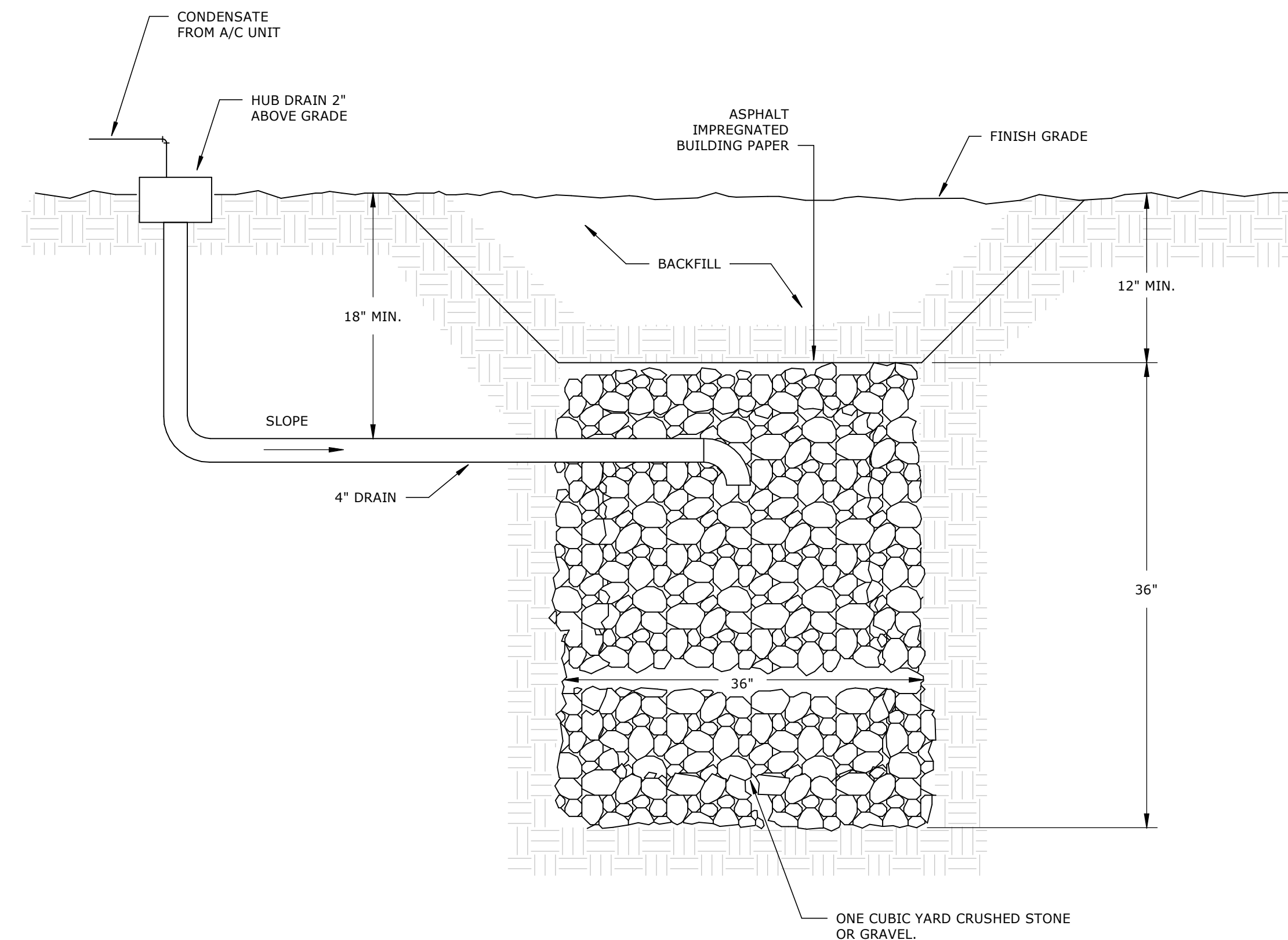
**3 - FURNACE PLENUM**  
NOT TO SCALE



**NOTES:**

1. PROVIDE SADDLES AT DUCT SUPPORT POINTS.
2. DO NOT TAKE DUCT SUPPORTS OR STRAPS INTO THE INSULATION.
3. PROVIDE INSULATION INSERT SO THAT INSULATION DOES NOT COMPRESS FROM WEIGHT OF DUCT.
4. PROVIDE SEMI-RIGID INSULATION ON ALL DUCTWORK IN MECHANICAL EQUIPMENT ROOMS AND OTHER HIGH ABUSE AREAS.
5. IN AREAS WHERE SPACE LIMITS INSTALLATION OF TRAPEZE SYSTEM SHOWN, LOW PROFILE DUCT SUPPORT SYSTEM MAY BE PERMITTED. SYSTEM TO BE EQUAL TO GRIPPLE. ALL SYSTEMS SHALL BE APPROVED BY SMACNA OR WILL NOT BE PERMITTED.

**4 - INSULATION AT DUCT SUPPORT**  
NOT TO SCALE



**5 - AREA CONDENSATE DRAIN**  
NOT TO SCALE

HVAC -- PACKAGED UNIT SCHEDULE																				
DESIGNATION		DESCRIPTION	MANUFACTURER	MODEL	AIRFLOWS		SUPPLY FAN	COOLING DATA				HEATING DATA			ELECTRICAL DATA				WEIGHT	
TYPE	MARK				SUPPLY AIR	OUTSIDE AIR (MINIMUM)	EXTERNAL STATIC PRESS.	NOMINAL COOLING	ENTERING	LEAVING		TYPE	HEAT PUMP	ELECTRIC	VOLTAGE	PHASE	MCA	MOCP		
RTU	1	PACKAGED UNITARY GAS AIR HANDLING UNIT	RHEEM	ZR	1,650 CFM	200 CFM	0.50 in-wg	5.0 ton	77.0 °F	63.6 °F	56.0 °F	55.0 °F	HEAT PUMP W/ AUX. ELECTRIC	57,000 Btu/h	15.0 kW	208 V	1	115.0 A	125 A	700 lb

- PROVIDE WITH 2-STAGE LEAD COMPRESSOR, 2-AUX. HEAT, 100% OSA ECONOMIZER WITH DUAL-ENTHALPY CONTROL.
- PROVIDE WITH LOCAL DISCONNECT, POWERED CONVENIENCE OUTLET, STAINLESS STEEL DRAIN PAN, PHASE AND BROWN-OUT PROTECTION, HAIL GUARD, OSA INTAKE HOOD WITH BIRD SCREEN.
- PROVIDE WITH TOOLLESS ACCESS ON CABINET DOORS.
- PROVIDE WITH STANDARD 20" ROOF CURB WITH VIBRATION ISOLATION.
- PROVIDE WITH 2" PLEATED MERV 8 FILTERS.
- UNITS SHALL BE SELECTED AT AMBIENT CONDITIONS OF: 100 F DB AND 77 F WB.
- UNITS SHALL MEET CURRENT ENERGY CODE MINIMUM EFFICIENCY REQUIREMENTS.
- ALL UNITS WITH 2,000 CFM SUPPLY AND OVER SHALL BE PROVIDED WITH SA/RA SMOKE DETECTION.
- APPROVED ALTERNATE MANUFACTURERS SHALL BE TEMPMASER, TRANE, CARRIER.

HVAC -- MINISPLIT FAN COIL SCHEDULE												
DESIGNATION		DESCRIPTION	MANUFACTURER	MODEL	AIRFLOW DATA		TOTAL COOLING CAPACITY	TOTAL HEATING CAPACITY	ELECTRICAL DATA		REMARKS	
TYPE	MARK				DESIGN SUPPLY AIR (HIGH SPEED)	MIN. OSA			VOLTAGE	PHASE		
MSFC	1	MULTI-POSITION FAN COIL	SAMSUNG	AC048BNZDCH	1,600 CFM	100 CFM	48,000 Btu/h	53,000 Btu/h	208 V	1	INDOOR UNIT SHALL BE POWERED THROUGH OUTDOOR UNIT.	
MSFC	2	MULTI-POSITION FAN COIL	SAMSUNG	AC048BNZDCH	1,600 CFM	100 CFM	48,000 Btu/h	53,000 Btu/h	208 V	1	INDOOR UNIT SHALL BE POWERED THROUGH OUTDOOR UNIT.	
MSFC	3	MULTI-POSITION FAN COIL	SAMSUNG	AC048BNZDCH	1,600 CFM	100 CFM	48,000 Btu/h	53,000 Btu/h	208 V	1	INDOOR UNIT SHALL BE POWERED THROUGH OUTDOOR UNIT.	
MSFC	4	MULTI-POSITION FAN COIL	SAMSUNG	AC048BNZDCH	1,600 CFM	100 CFM	48,000 Btu/h	53,000 Btu/h	208 V	1	INDOOR UNIT SHALL BE POWERED THROUGH OUTDOOR UNIT.	
MSFC	5	MULTI-POSITION FAN COIL	SAMSUNG	AC048BNZDCH	1,600 CFM	100 CFM	48,000 Btu/h	53,000 Btu/h	208 V	1	INDOOR UNIT SHALL BE POWERED THROUGH OUTDOOR UNIT.	
MSFC	6	MULTI-POSITION FAN COIL	SAMSUNG	AC048BNZDCH	1,600 CFM	100 CFM	48,000 Btu/h	53,000 Btu/h	208 V	1	INDOOR UNIT SHALL BE POWERED THROUGH OUTDOOR UNIT.	
MSFC	7A	WALL COIL	SAMSUNG	-	400 CFM		12,000 Btu/h	12,000 Btu/h	208 V	1	INDOOR UNIT SHALL BE POWERED THROUGH OUTDOOR UNIT.	
MSFC	7B	WALL COIL	SAMSUNG	-	400 CFM		12,000 Btu/h	12,000 Btu/h	208 V	1	INDOOR UNIT SHALL BE POWERED THROUGH OUTDOOR UNIT.	

- PROVIDE UNITS 1, 7A, AND 7B WITH CONDENSATE PUMP EQUAL TO LITTLE GIANT.

HVAC -- MINI SPLIT HEAT PUMP SCHEDULE								
DESIGNATION		DESCRIPTION	MANUFACTURER	MODEL	ELECTRICAL DATA			
TYPE	MARK				VOLTAGE	PHASE	MCA	MOCP
MSHP	1	MINI-SPLIT HEAT PUMP	SAMSUNG	AC048BXADCH	208 V	1	32.8 A	40.0 A
MSHP	2	MINI-SPLIT HEAT PUMP	SAMSUNG	AC048BXADCH	208 V	1	32.8 A	40.0 A
MSHP	3	MINI-SPLIT HEAT PUMP	SAMSUNG	AC048BXADCH	208 V	1	32.8 A	40.0 A
MSHP	4	MINI-SPLIT HEAT PUMP	SAMSUNG	AC048BXADCH	208 V	1	32.8 A	40.0 A
MSHP	5	MINI-SPLIT HEAT PUMP	SAMSUNG	AC048BXADCH	208 V	1	32.8 A	40.0 A
MSHP	6	MINI-SPLIT HEAT PUMP	SAMSUNG	AC048BXADCH	208 V	1	32.8 A	40.0 A
MSHP	7	MULTI-SPLIT HEAT PUMP	SAMSUNG	AJ024XJ3CH	208 V	1	19.5 A	25.0 A

- PROVIDE WITH LOW AMBIENT COOLING, HARD-START KIT, HAIL GUARDS, AND LOCAL DISCONNECT.
- INDOOR AND OUTDOOR UNITS SHALL BE PROVIDED FROM SAME MANUFACTURER. APPROVED ALTERNATE MANUFACTURERS SHALL BE DAIKIN AND LG.
- UNITS SHALL BE SELECTED AT AMBIENT CONDITIONS OF: 100 F DB AND 77 F WB.
- UNITS SHALL MEET CURRENT ENERGY CODE MINIMUM EFFICIENCY REQUIREMENTS.

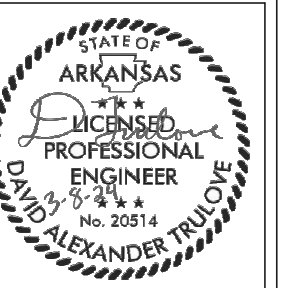
HVAC -- EXHAUST FAN SCHEDULE										
DESIGNATION		MANUFACTURER	MODEL	EXHAUST	EXTERNAL STATIC	ELECTRIC MOTOR DATA				REMARKS
TYPE	MARK					VOLTAGE	PHASE	FLA	DRIVE	
EF	1	COOK	GC	300 CFM	0.25 in-wg	120 V	1	1.7 A	DIRECT	INTERLOCK WITH LIGHTS IN ASSOCIATED ROOM.
EF	2	COOK	GC	300 CFM	0.25 in-wg	120 V	1	1.7 A	DIRECT	INTERLOCK WITH LIGHTS IN ASSOCIATED ROOM.
EF	3	COOK	GC	300 CFM	0.25 in-wg	120 V	1	1.7 A	DIRECT	INTERLOCK WITH LIGHTS IN ASSOCIATED ROOM.

- PROVIDE WITH SOLID STATE SPEED CONTROLLER, DISCHARGE BACKDRAFT DAMPER, ISOLATOR KIT, DISCONNECT SWITCH.
- PROVIDE WITH MANUFACTURER'S METAL GRILLE OPTION.
- EXHAUST FAN SHALL BE SUPPORTED BY STRUCTURE BY MEANS OF ALL THREAD RODS AND MANUFACTURER'S MOUNTING BRACKETS.
- EXHAUST FAN SHALL BE INTERLOCKED WITH LIGHTS IN ASSOCIATED ROOM.
- APPROVED ALTERNATE MANUFACTURERS SHALL BE GREENHECK AND TWIN CITY.

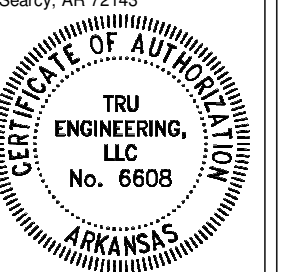
HVAC -- AIR TERMINAL SCHEDULE															
MARK	MANUFACTURER	MODEL	DESCRIPTION	MAX AIRFLOW	INLET SIZE			FACE SIZE		MAX. NOISE CRITERIA	OPTIONS				
					DIAMETER	WIDTH	LENGTH	W	L		FACE STYLE	FINISH	DAMPER STYLE	MATERIAL	MOUNTING
A	TITUS	THRA-20-26-B	Adjustable Round Ceiling Diffuser	3,060 CFM	20			24"	24"	25	ROUND CEILING DIFFUSER	WHITE	ADJUSTABLE 4 CONE	ALUMINUM	SURFACE MOUNT
C	TITUS	OMNI AA-08-1-24x24-26	ALUMINUM SQUARE PLAQUE DIFFUSER	350 CFM	8			24"	24"	25	PLAQUE	WHITE	OPPOSED BLADE	ALUMINUM	LAY-IN CEILING
R11	TITUS	TBR	4-SLOT; 1.5" SLOTS; SLOT RETURN	300 CFM		13"	5"	8"	60"	0	DOUBLE DEFLECTION BLADES	WHITE	OPPOSED BLADE	ALUMINUM	SURFACE MOUNT
Z	TITUS	TBD-80	4-SLOT; 1" SLOTS; PLENUM SLOT DIFFUSER	300 CFM		13"	5"	8"	60"	0	DOUBLE DEFLECTION BLADES	WHITE	OPPOSED BLADE	ALUMINUM	SURFACE MOUNT

- PROVIDE WITH MANUFACTURER'S MOUNTING SYSTEM FOR CEILING TYPE ON WHICH DEVICE IS MOUNTED.
- PROVIDE ALL LAY-IN RETURN GRILLES WITH ROUND NECK ADAPTOR WHERE APPLICABLE.
- COLOR OPTION SHALL BE INCLUDED IN BID PRICE UNLESS SPECIFICALLY NOTED AS "WHITE" IN SCHEDULE. SUBMIT MANUFACTURER'S COLOR OPTIONS TO ARCHITECT FOR FINAL APPROVAL BEFORE ORDERING DEVICES.
- APPROVED ALTERNATE MANUFACTURERS SHALL BE KRUEGER AND PRICE.

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SOUTHERN TENANT FARMER'S UNION GRAIN BIN RESTORATION  
 SHEET CONTENTS  
 MECHANICAL SCHEDULES  
 TYRONZA, ARKANSAS 72386

ISSUE DATE  
 March 1, 2024  
 REVISIONS  
 RE-BID  
 April 19, 2024

SHEET NO.  
**M3.I**

## PLUMBING LEGEND

ABBREVIATION OR SYMBOL	DESCRIPTION	ABBREVIATION OR SYMBOL	DESCRIPTION
	DOMESTIC COLD WATER		FLEXIBLE PIPING
	DOMESTIC HOT WATER		EXISTING PIPING TO REMAIN (refer to line designation)
	DOMESTIC HOT WATER RETURN		EXISTING TO BE REMOVED (back to point indicated)
	SANITARY SEWER		CONNECT TO EXISTING
	SANITARY - GREASE WASTE		BELOW GRADE PIPING (fine dash)
	SANITARY - ACID WASTE	<b>THREADED WATER &amp; GAS PIPING</b>	
	STORM DRAIN		PIPE DOWN
	VENT		PIPE UP
	NATURAL GAS		THREADED TEE DOWN
	CONDENSATE DRAIN		THREADED TEE UP
<b>VALVING</b>			BRANCH - BOTTOM OF PIPE
	BUTTERFLY VALVE (lever operator)		BRANCH - TOP OF PIPE
	BUTTERFLY VALVE (wheel operator)		90 DEGREE ELBOW
	GATE VALVE		45 DEGREE ELBOW
	CHECK VALVE		TEE
	GLOBE VALVE		UNION
	STRAINER (Y-TYPE)	<b>LONG RADIUS SEWER &amp; VENT PIPING</b>	
	BALL VALVE		PIPE PENETRATION (through floor/wall/etc)
			DCW ROUGH-IN
			DHW ROUGH-IN

\* NOT ALL SYMBOLS MAY APPLY TO THIS PROJECT

### PLUMBING GENERAL NOTES:

- ALL PLUMBING WORK SHALL COMPLY WITH ALL LOCAL CODES, AUTHORITIES HAVING JURISDICTION, DRAWINGS AND SPECIFICATIONS. IF DISCREPANCIES ARE FOUND - THE MOST STRINGENT REQUIREMENT SHALL GOVERN WORK.
- ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRIC RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING, OR COMPONENT. CONTRACTOR SHALL NOT SCALE DRAWINGS. EQUIPMENT SCHEDULES SHALL TAKE PRECEDENCE OVER CONFLICTING DRAWING INFORMATION. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY CONTRACT DOCUMENTS. REFER TO COMPLETE PROJECT DOCUMENTS FOR COORDINATION WITH OTHER DISCIPLINES.
- EXCEPT WHERE MODIFIED BY SPECIFIC NOTATION TO THE CONTRARY, IT SHALL BE UNDERSTOOD THAT THE INDICATION AND/OR DESCRIPTION OF ANY ITEM IN THE DRAWINGS OR SPECIFICATIONS CARRIES WITH IT THE INSTRUCTION TO PROVIDE THE ITEM, REGARDLESS OF WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED AS PART OF THE INDICATION OR DESCRIPTION. REFER TO PLUMBING SCHEDULES AND SPECIFICATIONS FOR BASIS OF DESIGN, ACCEPTABLE MANUFACTURERS, AND MODELS OF PLUMBING FIXTURES AND EQUIPMENT.
- PROVIDE CLEANOUTS IN ALL SANITARY LINES, WHETHER SHOWN OR NOT, AT INTERVALS NOT TO EXCEED 100' AND AT EACH CHANGE IN DIRECTION GREATER THAN 45 DEGREES.
- PROVIDE A TWO-WAY CLEANOUT AT THE JUNCTION OF ALL BUILDING DRAINS AND BUILDING SEWERS.
- REFER TO SPECIFICATIONS FOR INSULATION REQUIREMENTS.
- ALL SANITARY LINES 2 1/2" AND SMALLER SHALL HAVE A MINIMUM SLOPE OF 1/4" PER FOOT. ALL SANITARY LINES 3" AND LARGER SHALL HAVE A MINIMUM SLOPE OF 1/8" PER FOOT. VERIFY EXISTING SANITARY LINE ELEVATIONS AND COORDINATE INSTALLATION TO ASSURE PROPER FLOW.
- SEAL ALL PIPE PENETRATIONS THROUGH WALLS, ROOF, AND FLOOR AIR AND WATER TIGHT.
- ALL FLOOR DRAINS SHALL HAVE DEEP SEAL TRAPS, 4" DEEP SEAL MINIMUM UNLESS NOTED OTHERWISE. PROVIDE A TRAP GUARD EQUAL TO PROSET OR SURE SEAL SIZED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS FOR ALL FLOOR DRAINS.
- ALL PIPE DROPS FROM CEILING PLENUM TO BELOW FLOOR SHALL BE MADE IN FURR-OUTS AT COLUMNS, IN WEBB OF BEAMS AT COLUMNS, OR IN WALLS UNLESS SHOWN OTHERWISE.
- ALL EXPOSED OR ACCESSIBLE P-TRAPS SHALL BE CHROME PLATED AND PROVIDED WITH BOTTOM CLEANOUT PLUGS. ALL EXPOSED PLUMBING TRIM SHALL BE CHROME PLATED.
- PROVIDE TIGHT-FITTED MOLDED PLASTIC INSULATION AT ALL EXPOSED WATER AND DRAIN PIPING FOR ADA FIXTURES PER ANSI A117.1 AND ADA REQUIREMENTS. FINISH SHALL BE WHITE.
- ALL DOMESTIC WATER SHALL BE ROUTED ABOVE CEILING. ALL DOMESTIC WATER ROUTED IN EXTERIOR WALLS SHALL BE INSTALLED ON CONDITIONED SIDE OF ROOM INSULATION.
- MAINTAIN A MINIMUM OF 15" BETWEEN ALL HVAC FRESH AIR INTAKES AND PLUMBING VENTS. COORDINATE WITH MECHANICAL BEFORE INSTALLATION OF VTRS.
- CONTRACTOR SHALL VISIT SITE AND VERIFY CONDITIONS PRIOR TO BIDDING.
- CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF UTILITIES AND INVERTS PRIOR TO ROUTING SERVICES. CONTRACTOR SHALL COORDINATE ALL SANITARY SEWER, FIRE, GAS AND DOMESTIC WATER LINES WITH EXISTING UTILITIES AND WITH CIVIL DRAWINGS. SEE CIVIL DRAWINGS FOR CONTINUATION OF ALL UTILITY LINES.
- CONTRACTOR SHALL PAY ALL UTILITY FEES AND CHARGES IN THE CONTRACT.
- PROVIDE ALL FITTINGS, TRANSITIONS, COUPLINGS, ADAPTORS, UNIONS, AND OTHER ACCESSORIES NEEDED TO COMPLETE CONNECTIONS AND PROVIDE FOR PROPER OPERATION OF PLUMBING FIXTURES AND PLUMBING EQUIPMENT.
- FIRE STOP ALL PIPE PENETRATIONS THROUGH RATED WALLS. REFER TO SPECIFICATIONS.
- PIPE SHALL NOT BE ROUTED OVER ELECTRICAL ROOMS, COMPUTER ROOMS, ELECTRICAL PANELS, OR ELECTRICAL EQUIPMENT UNLESS OTHERWISE NOTED.
- PROVIDE LEAD-FREE PRESSURE REDUCING VALVE AT DOMESTIC ENTRANCE TO PROVIDE ADEQUATE PRESSURE AT ALL OUTLETS IN ACCORDANCE WITH THE SYSTEM REQUIREMENTS.
- EACH FIXTURE GROUP OR BATTERY OF FIXTURES SHALL BE PROVIDED WITH A SHUTOFF VALVE IN THE DOMESTIC HOT AND COLD WATER SUPPLY LINES ABOVE CEILING. VALVES SHALL BE ACCESSIBLE FROM ROOM BELOW.
- PAINT EXPOSED PIPING AND PIPE INSULATION. COORDINATE WITH OWNER FOR FINAL COLOR.
- ALL UNDER FLOOR WATER PIPING SHALL BE PROVIDED WITH A POLYETHYLENE SLEEVE. EXTEND SLEEVE UP THROUGH FLOOR SLAB AND SEAL AIR AND WATER TIGHT.
- PLASTIC PIPE IS PROHIBITED IN RETURN AIR PLENUMS. ALL PIPING AND PIPE CONNECTIONS IN RETURN AIR PLENUMS SHALL BE PLENUM RATED.
- PIPING THROUGH FOUNDATION WALLS AND FOOTINGS SHALL BE SLEEVED AS PER STRUCTURAL DETAILS.
- ALL PIPE CONNECTIONS BETWEEN DISSIMILAR METALS SHALL BE MADE THROUGH DIELECTRIC UNIONS.
- ALL PLUMBING COMPONENTS WITH ELECTRICAL REQUIREMENTS SHALL BE INSTALLED WITH THE ELECTRICAL INFRASTRUCTURE NECESSARY TO PROVIDE A FULLY FUNCTIONING SYSTEM. IF NOT SPECIFICALLY SHOWN ON ELECTRICAL SCHEDULE, PLUMBING FIXTURES REQUIRING ELECTRICAL SERVICE SHALL BE FED FROM BREAKER OF ADEQUATE CAPACITY.
- REFER TO PLUMBING SPECIFICATIONS FOR PIPE MATERIAL AND INSULATION REQUIREMENTS.
- EXACT LOCATION OF ALL EQUIPMENT AND PIPING SHALL BE COORDINATED WITH OTHER TRADES. CEILING MOUNTED SPRINKLER AND LIGHTING SHALL TAKE PRECEDENCE OVER CEILING MOUNTED MECHANICAL REQUIREMENTS.
- PROVIDE FABRICATED EXPANSION LOOP OR MANUFACTURED EXPANSION DEVICE ON ALL PIPING SYSTEMS CROSSING BUILDING EXPANSION JOINTS.
- WATER SUPPLY CONNECTIONS TO COFFEE MACHINES AND NONCARBONATED BEVERAGE DISPENSERS SHALL BE PROVIDED WITH A BACKFLOW PREVENTER OR AN AIR GAP.

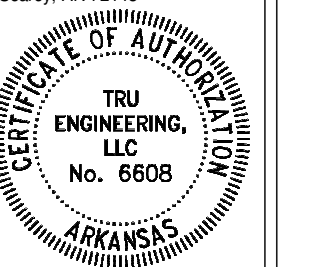
### PLUMBING -- FIXTURE SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL	ACCESSORIES	FAUCETS & FITTINGS	STOPS	TRAPS	MOUNTING	BRANCH CONNECTIONS			REMARKS
									DCW	DHW	SS	
DCOTG	CLEAN OUT TO GRADE	ZURN	Z1400	-	-	-	-	AT GRADE			4"	SHALL BE PROVIDED WITH HEAVY DUTY TOP.
FCO	FLOOR CLEANOUT	ZURN	ZN1400	-	-	-	-	FLOOR			4"	MATCH SIZE TO SANITARY LINE SERVED.
P1A	WATER CLOSET - FLUSH TANK - ADA	AMERICAN STANDARD	CADET	ELONGATED SEAT	-	MCGUIRE COMMERCIAL	INTEGRAL	FLOOR	1/2"		4"	
P1B	WATER CLOSET - FLUSH TANK	AMERICAN STANDARD	CADET	SEAT	-	MCGUIRE COMMERCIAL	INTEGRAL	FLOOR	1/2"		4"	
P2	URINAL	AMERICAN STANDARD	DECORUM	-	6045.013.002 FLUSH VALVE	INTEGRAL	INTEGRAL	WALL	3/4"		2"	
P3	UNDERMOUNT LAVATORY	KOHLER	VERTICYL 8981	GRID DRAIN	T&S B-2866-04	MCGUIRE COMMERCIAL	MCGUIRE COMMERCIAL	UNDERMOUNT	1/2"	1/2"	2"	
P4	ADA WALL MOUNT LAVATORY	AMERICAN STANDARD	DECORUM	GRID DRAIN; WALL CARRIER	T&S B-2866-04	MCGUIRE COMMERCIAL	MCGUIRE COMMERCIAL	WALL	1/2"		2"	
P5	MOP SINK - CORNER	STERN WILLIAMS	ELFIN SQUARE EB-54	MOP HANGER; HOSE AND HOSE BRACKET; 24" STAINLESS STEEL SPLASH GUARD; GRID DRAIN	T-10-VB SERVICE FAUCET	INTEGRAL	SCH. 40 PVC	FLOOR	1/2"	1/2"	3"	
P6	KITCHEN SINK - DOUBLE COMPARTMENT	JUST MFG.	UDADA1832A55-J	BADGER 5XP GARBAGE DISPOSAL	J-902 (FAUCET W/SPRAYER)	MCGUIRE COMMERCIAL	MCGUIRE COMMERCIAL	UNDERMOUNT	1/2"	1/2"	2"	
WB	MINI-ICE MAKER WALL BOX - STAINLESS	GUY GRAY	SSMIB1AB	-	1/4 TURN VALVE	-	-	WALL	1/2"			
WCO	WALL CLEANOUT	ZURN	Z1441	-	-	-	-	WALL			4"	MATCH SIZE TO SANITARY BRANCH SERVED.

- ALL FIXTURES SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING FAUCET SPACING AND STYLE WITH MOUNTING HOLES IN FIXTURE.
- ALL FIXTURES WITH HOT WATER FEEDS SHALL BE PROVIDED WITH THERMOSTATIC MIXING VALVE INSTALLED AS PER MANUFACTURER'S RECOMMENDATION.
- CONTRACTOR SHALL INSTALL ALL PLUMBING FIXTURES IN COMPLIANCE WITH ALL APPLICABLE CODES AND ALL AUTHORITIES HAVING JURISDICTION.
- PROVIDE WHITE ADA WRAP ON P-TRAP AND STOPS FOR ALL ADA LAVATORY FIXTURES.

### PLUMBING -- EQUIPMENT SCHEDULE

TAG	MARK	DESCRIPTION	MANUFACTURER	MODEL	MOUNTING	TANK VOLUME	BRANCH CONNECTIONS		DESIGN EWT	WH SETPOINT	ELECTRICAL DATA			REMARKS
							DCW	DHW			VOLTAGE (V)	PHASE	WATTAGE	
WH	1	LOW PROFILE ELECTRIC WATER HEATER	A.O. SMITH	EJCS	SUSPENDED	10 gal	3/4"	3/4"	55.0 °F	110.0 °F	120 V	1	2.0 kW	MOUNT BELOW COUNTER. PROVIDE WITH DRAIN PAN AND T&P VALVE ROUTED TO EXTERIOR.
WH	2	LOW PROFILE ELECTRIC WATER HEATER	A.O. SMITH	EJCS	SUSPENDED	10 gal	3/4"	3/4"	55.0 °F	110.0 °F	120 V	1	2.0 kW	MOUNT BELOW COUNTER. PROVIDE WITH DRAIN PAN AND T&P VALVE ROUTED TO EXTERIOR.

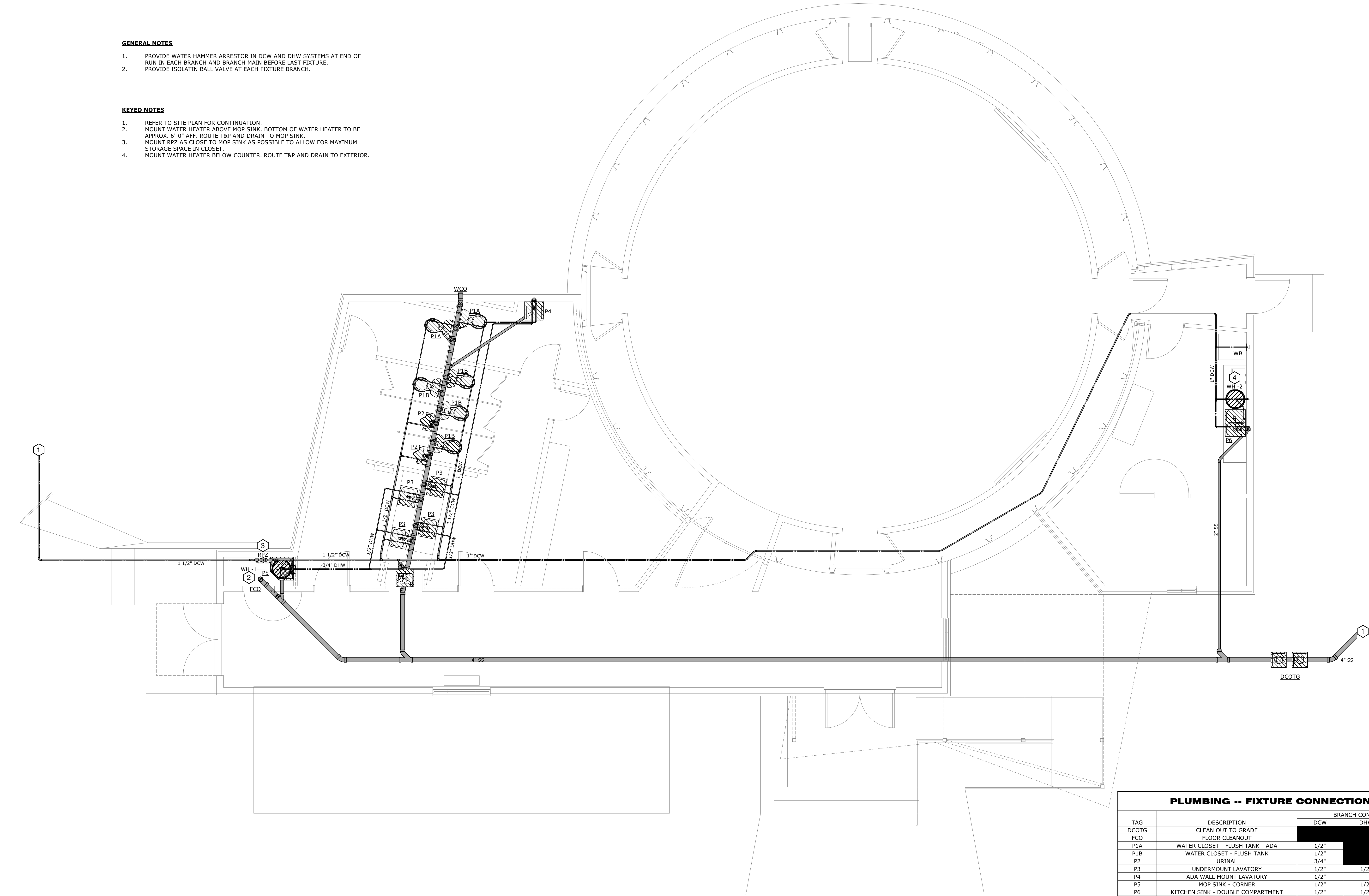


**GENERAL NOTES**

1. PROVIDE WATER HAMMER ARRESTOR IN DCW AND DHW SYSTEMS AT END OF RUN IN EACH BRANCH AND BRANCH MAIN BEFORE LAST FIXTURE.
2. PROVIDE ISOLATING BALL VALVE AT EACH FIXTURE BRANCH.

**KEYED NOTES**

1. REFER TO SITE PLAN FOR CONTINUATION.
2. MOUNT WATER HEATER ABOVE MOP SINK. BOTTOM OF WATER HEATER TO BE APPROX. 6'-0" AFF. ROUTE T&P AND DRAIN TO MOP SINK.
3. MOUNT RPZ AS CLOSE TO MOP SINK AS POSSIBLE TO ALLOW FOR MAXIMUM STORAGE SPACE IN CLOSET.
4. MOUNT WATER HEATER BELOW COUNTER. ROUTE T&P AND DRAIN TO EXTERIOR.



PLUMBING -- FIXTURE CONNECTION Ø				
TAG	DESCRIPTION	BRANCH CONNECTIONS		
		DCW	DHW	SS
DCOTG	CLEAN OUT TO GRADE			4"
FCO	FLOOR CLEANOUT			4"
P1A	WATER CLOSET - FLUSH TANK - ADA	1/2"		4"
P1B	WATER CLOSET - FLUSH TANK	1/2"		4"
P2	URINAL	3/4"		2"
P3	UNDERMOUNT LAVATORY	1/2"	1/2"	2"
P4	ADA WALL MOUNT LAVATORY	1/2"		2"
P5	MOP SINK - CORNER	1/2"	1/2"	3"
P6	KITCHEN SINK - DOUBLE COMPARTMENT	1/2"	1/2"	2"
WB	MINI-ICE MAKER WALL BOX - STAINLESS	1/2"		4"
WCO	WALL CLEANOUT			4"

**1 PLUMBING PLAN**  
1/4" = 1'-0"

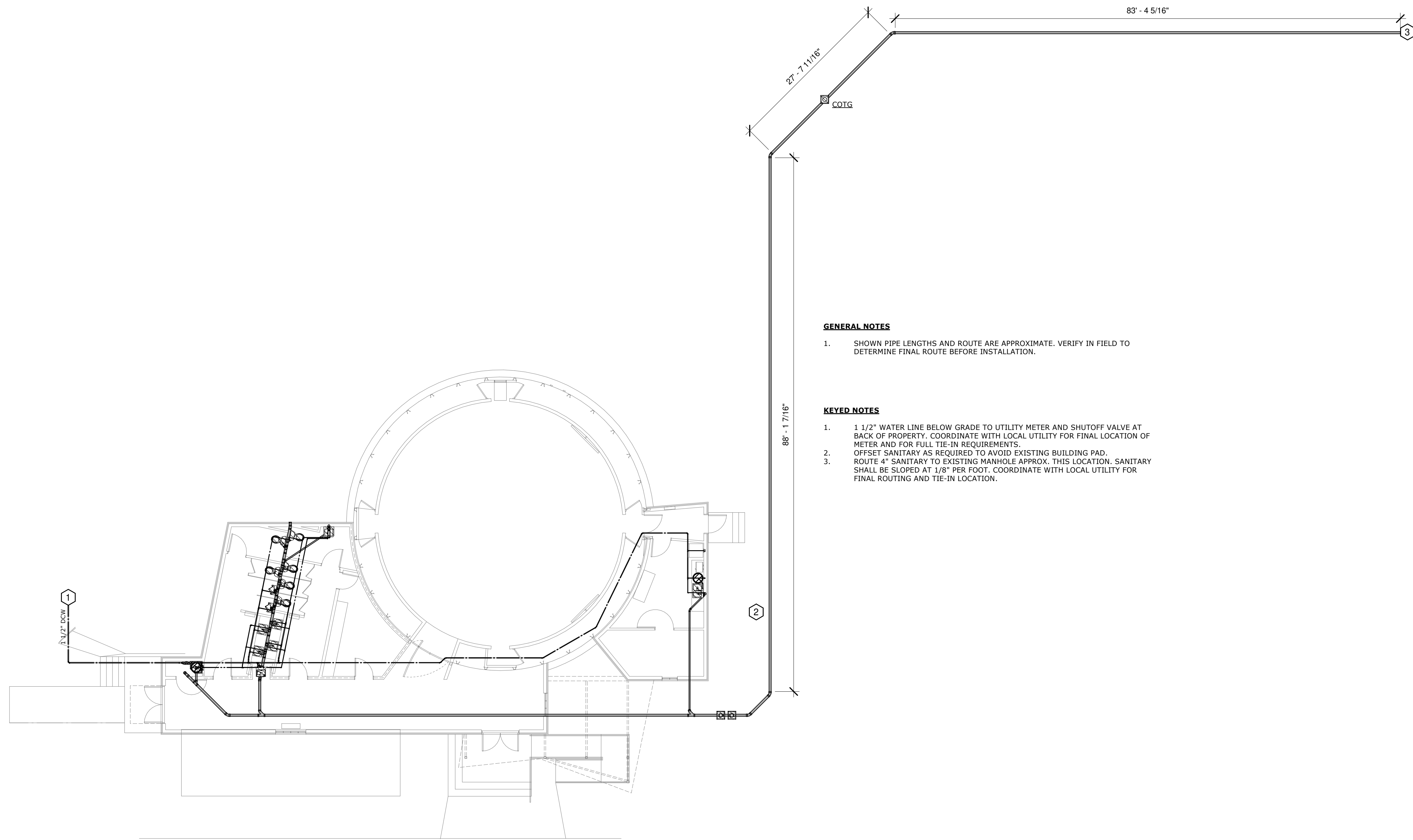


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ISSUE DATE:  
March 1, 2024  
REVISIONS:  
RE-BID  
April 19, 2024





**GENERAL NOTES**

1. SHOWN PIPE LENGTHS AND ROUTE ARE APPROXIMATE. VERIFY IN FIELD TO DETERMINE FINAL ROUTE BEFORE INSTALLATION.

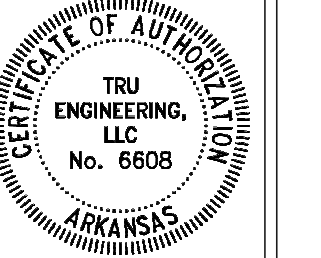
**KEYED NOTES**

1. 1 1/2" WATER LINE BELOW GRADE TO UTILITY METER AND SHUTOFF VALVE AT BACK OF PROPERTY. COORDINATE WITH LOCAL UTILITY FOR FINAL LOCATION OF METER AND FOR FULL TIE-IN REQUIREMENTS.
2. OFFSET SANITARY AS REQUIRED TO AVOID EXISTING BUILDING PAD.
3. ROUTE 4" SANITARY TO EXISTING MANHOLE APPROX. THIS LOCATION. SANITARY SHALL BE SLOPED AT 1/8" PER FOOT. COORDINATE WITH LOCAL UTILITY FOR FINAL ROUTING AND TIE-IN LOCATION.

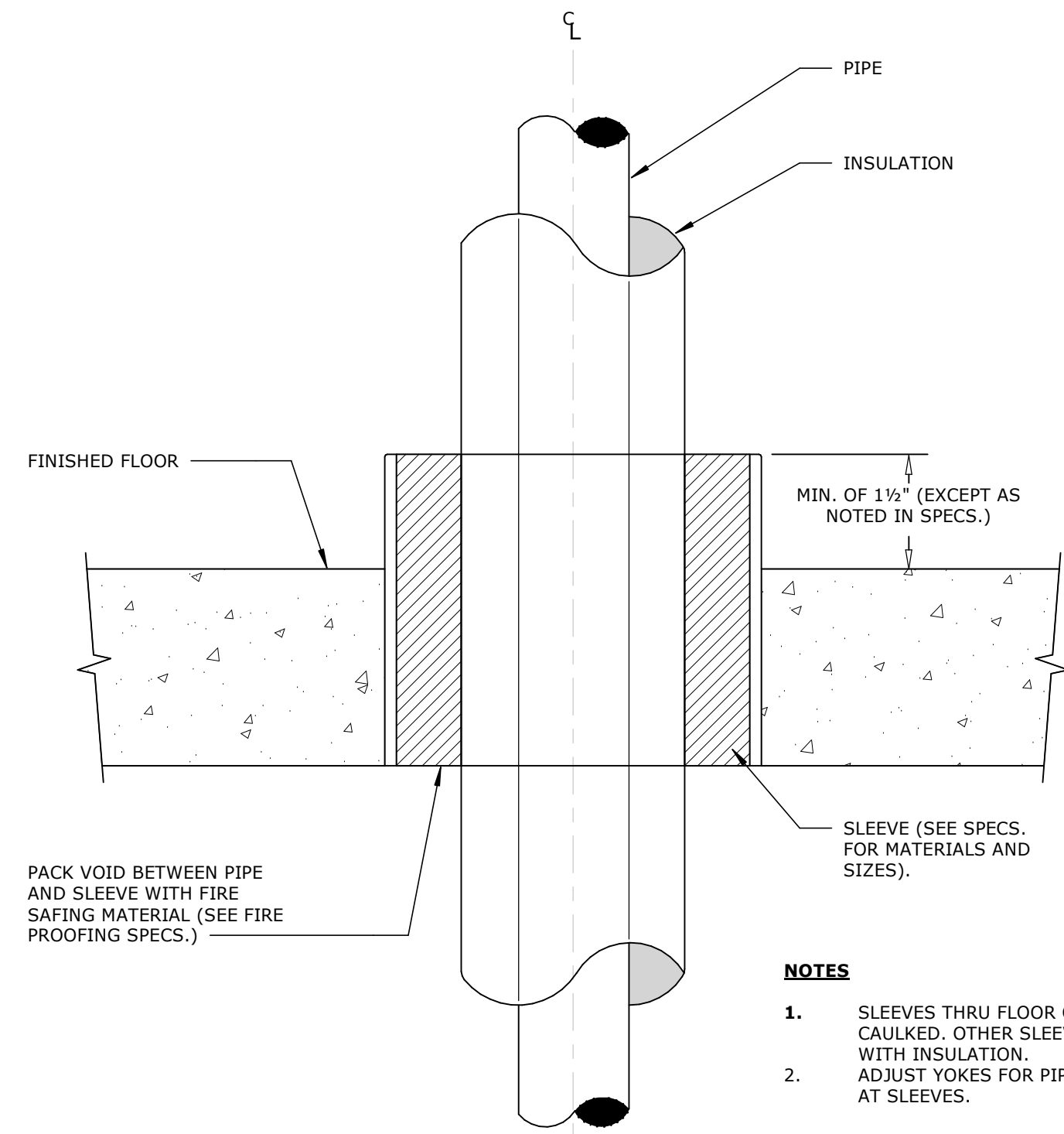
**1 PLUMBING SITE PLAN**  
1" = 10'-0"



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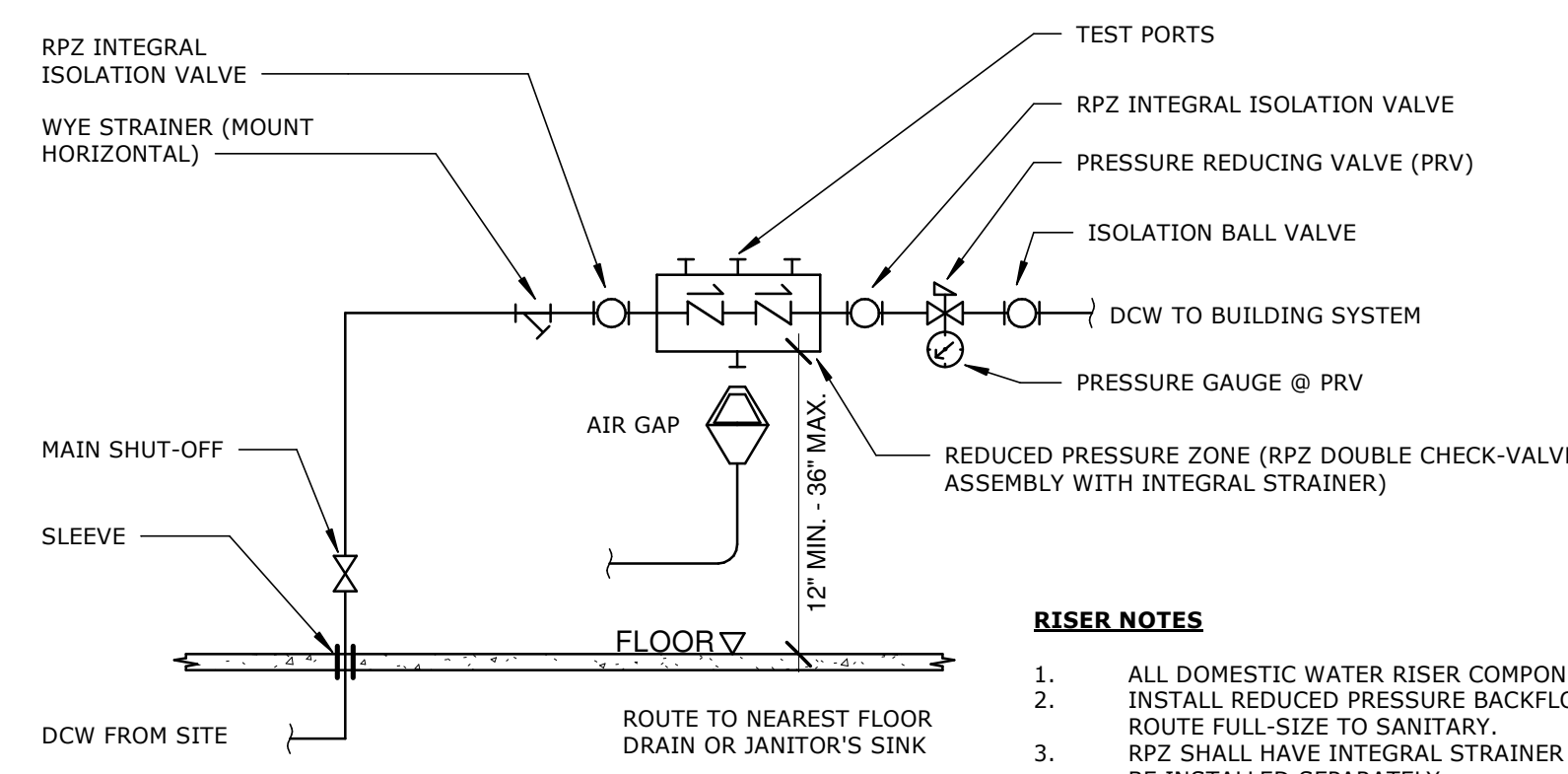
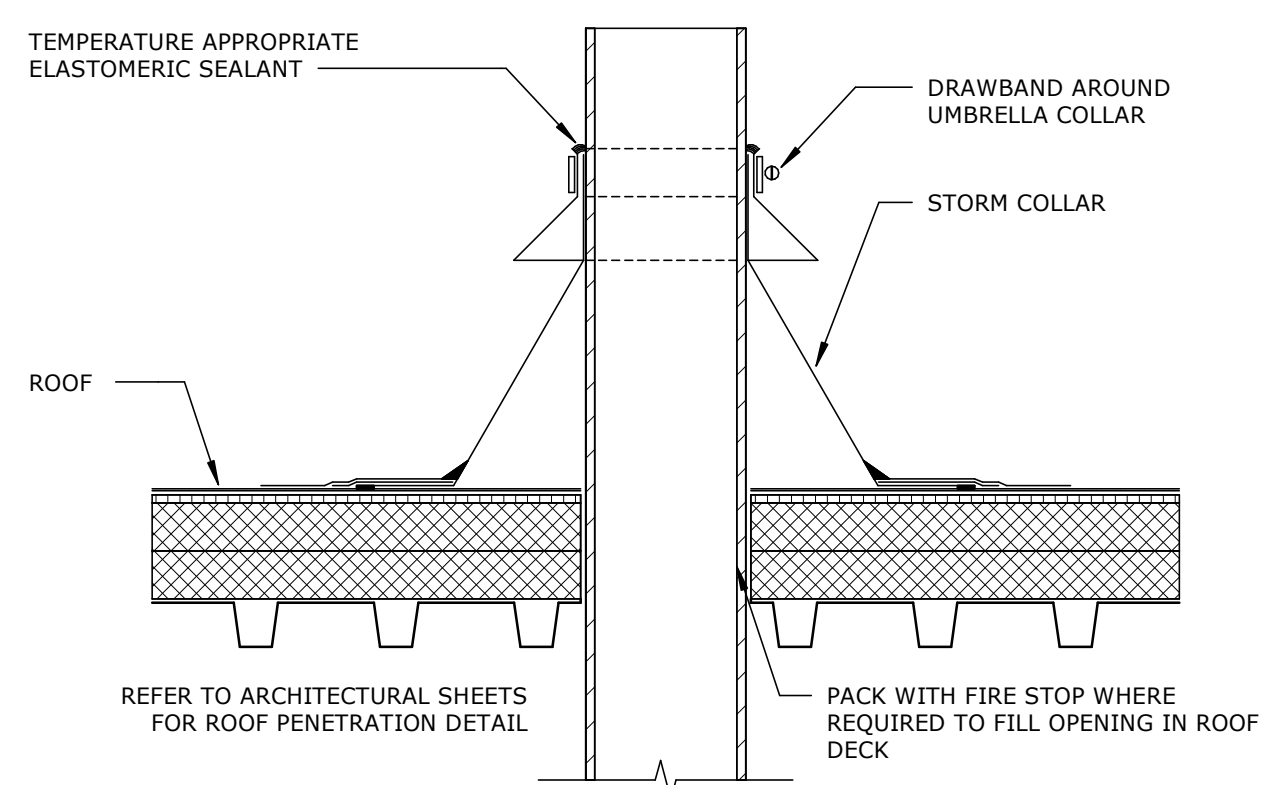


ISSUE DATE	March 1, 2024
REVISIONS	RE-BID April 19, 2024



- NOTES:**
1. SLEEVES THRU FLOOR ON GRADE SHALL BE CAULKED. OTHER SLEEVES SHALL BE FILLED WITH INSULATION. ADJUST YOKES FOR PIPE FLOOR SUPPORT TO FIT AT SLEEVES.
  2. SLEEVES THRU FLOOR ON GRADE SHALL BE CAULKED. OTHER SLEEVES SHALL BE FILLED WITH INSULATION. ADJUST YOKES FOR PIPE FLOOR SUPPORT TO FIT AT SLEEVES.

- NOTES:**
1. VENT ABOVE ROOF SHALL BE PAINTED TO MATCH ROOF. COORDINATE WITH ARCHITECT.
  2. IF ARCHITECTURAL PIPE PENETRATION DETAIL IS AVAILABLE, IT SHALL SUPERCEDE THIS DETAIL.



RPZ SIZE	MAKE	MODEL
1/4" - 2"	WATTS	LF009M2QT
2 1/2" - 3"	WATTS	LF009QTSFDA
4" - 10"	WATTS	LF909OSYSFDA

- RPZ NOTES:**
1. IF INCOMING PRESSURE IS 70PSI OR GREATER, PROVIDE PRV EQUAL TO WATTS LF223 FOR 2 1/2" AND BELOW. PRV SHALL BE EQUAL TO WATTS LFN223B FOR 3".
  2. SIZE PRV PER PLANS OR MATCH RPZ SIZE, DO NOT SIZE BASED ON DISTRIBUTION PIPE SIZE.
  3. ENGINEER SHALL BE INFORMED IF INCOMING PRESSURE AT BUILDING IS 150PSI OR GREATER.

- RISER NOTES:**
1. ALL DOMESTIC WATER RISER COMPONENTS SHALL BE LEAD-FREE.
  2. INSTALL REDUCED PRESSURE BACKFLOW PREVENTER WITH MANUFACTURER'S AIR GAP AND ROUTE FULL-SIZE TO SANITARY.
  3. RPZ SHALL HAVE INTEGRAL STRAINER UNLESS SPATIAL CONSTRAINTS REQUIRE STRAINER TO BE INSTALLED SEPARATELY.
  4. INSTALL PIPE STANDS TO SUPPORT THE COMPONENTS. DO NOT SUPPORT ASSEMBLIES FROM PIPING. INSTALL BEARING PLATES ON CONCRETE FLOOR UNDER EACH SUPPORT.
  5. COORDINATE FINAL LOCATION OF DOMESTIC RISER WITH ALL OTHER SYSTEMS AND EQUIPMENT IN ASSOCIATED ROOM. RISER SHALL NOT INTERFERE WITH OR IMPEDE OPERATIONS OF OTHER SYSTEMS OR FACILITY PERSONNEL.
  6. INSTALL ALL VALVES SO THAT VALVE HANDLES ARE NOT IMPEDED IN ANY MANNER AND ARE EASILY OPERATED FROM INTERIOR OF ROOM.

**1 PIPE SLEEVE THROUGH FLOOR**

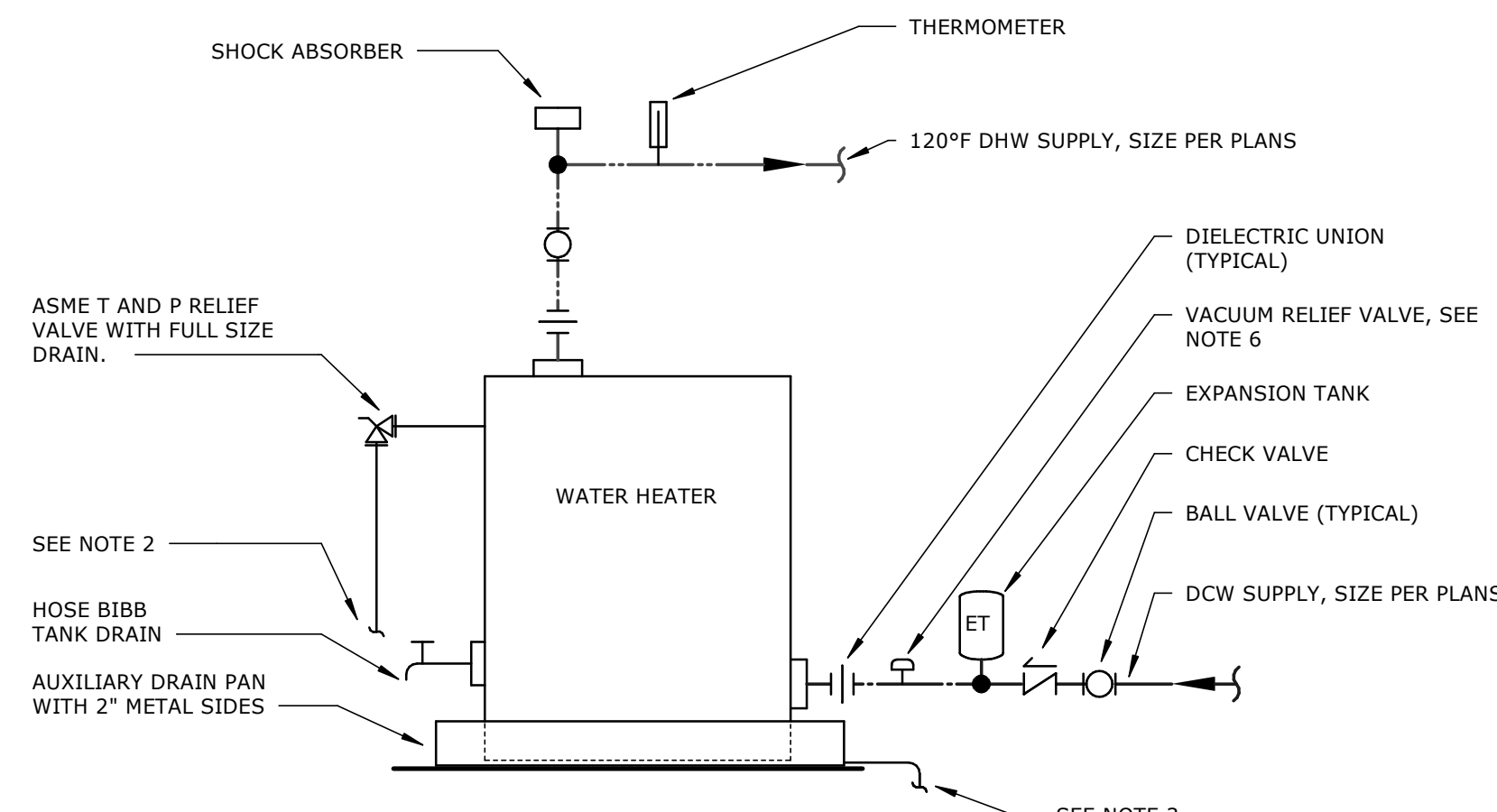
NOT TO SCALE

**2 VENT THROUGH ROOF**

NOT TO SCALE

**3 RPZ DOMESTIC WATER RISER**

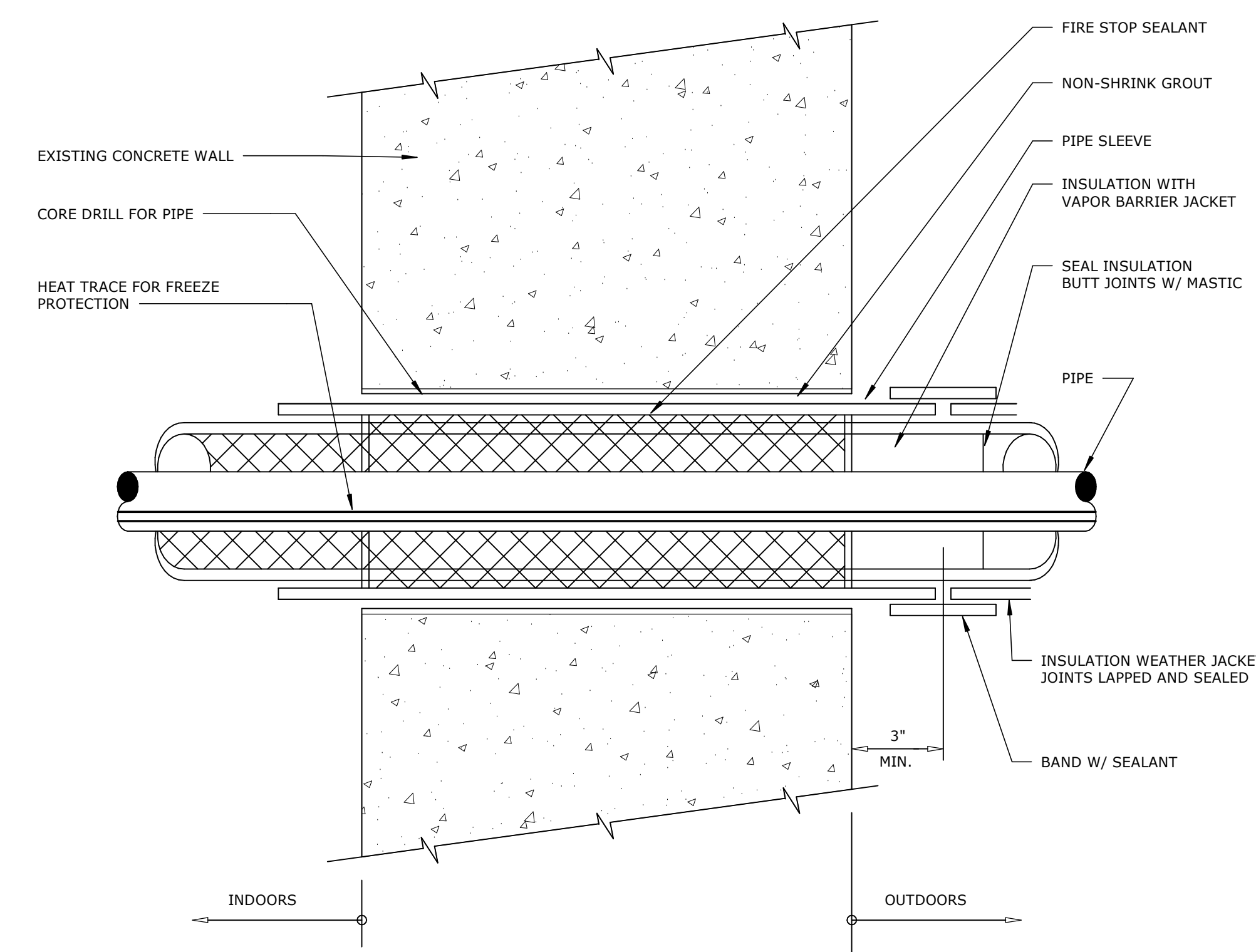
NOT TO SCALE



- NOTES:**
1. PROVIDE THERMAL EXPANSION TANK ON COLD WATER INLET. SIZE PER MANUFACTURER'S RECOMMENDATION.
  2. T & P RELIEF VALVE SHALL DISCHARGE FULL SIZE TO SANITARY. T&P DISCHARGE SHALL NOT CAUSE A THREAT TO OR INTERFERE WITH FACILITY OPERATIONS, FACILITY ITSELF, EQUIPMENT OR PERSONNEL. THE DISCHARGE PIPE SHALL NOT HAVE ANY TRAPPED SECTIONS.
  3. PAN DRAIN SHALL EXTEND FULL SIZE TO SANITARY.
  4. T & P RELIEF VALVE AND DRAIN PAN DISCHARGE SHALL CONFORM TO ALL LOCAL CODES AND AUTHORITIES HAVING JURISDICTION.
  5. FOR SUSPENDED WATER HEATERS, PROVIDE PRE-MANUFACTURED PLATFORM EQUAL TO 'HOLD-RITE'. PLATFORM SHALL BE RATED FOR FULL WEIGHT OF WATER HEATER AND ACCESSORIES WHEN FILLED. PROVIDE SECONDARY SEISMIC STRAP AROUND WATER HEATER AND SECURED TO STRUCTURE.
  6. PROVIDE BOTTOM FED WATER HEATERS WITH VACUUM RELIEF VALVE WHICH MEETS ANSI Z21.22.

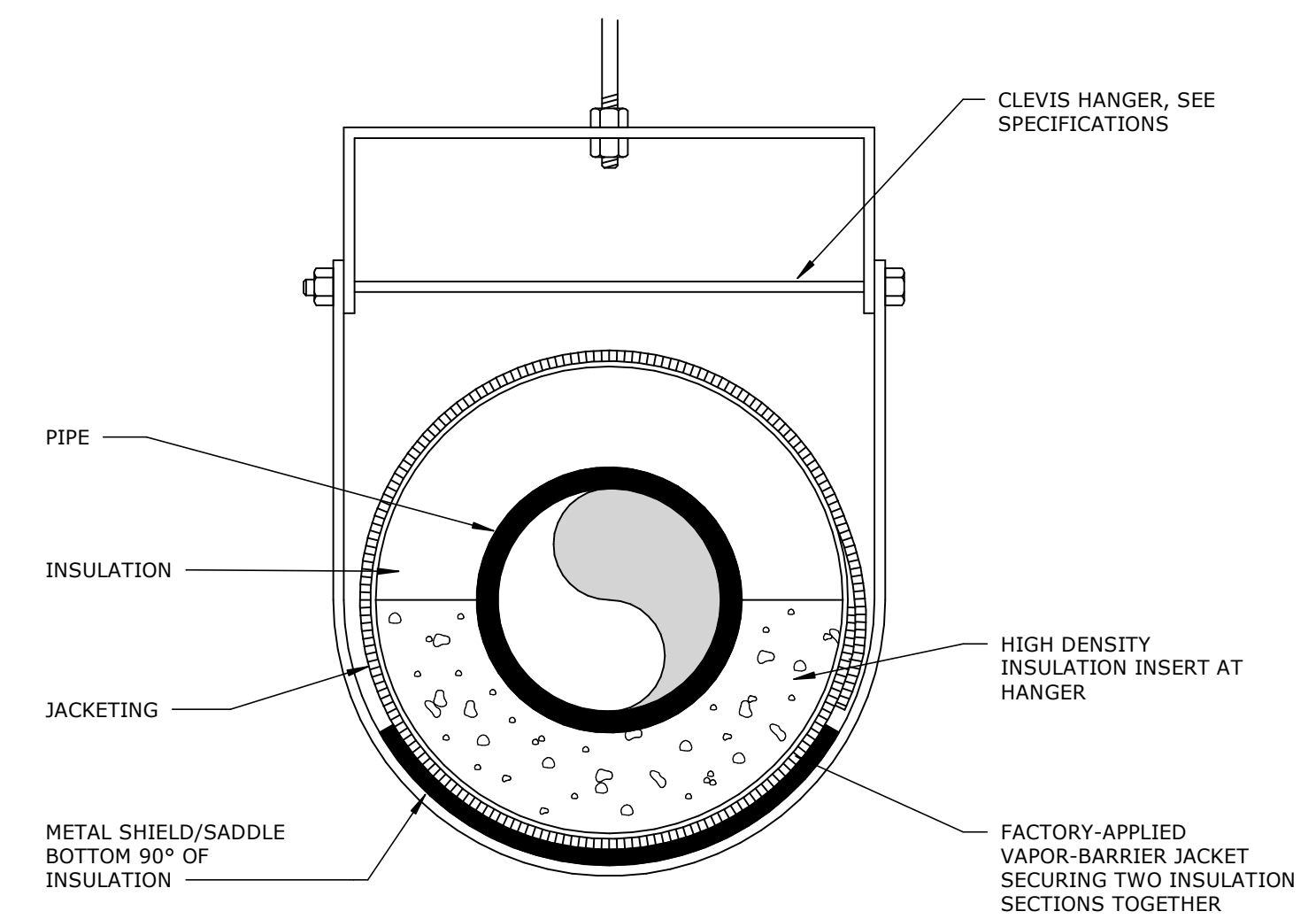
**4 WATER HEATER - SINGLE TEMP.**

NOT TO SCALE



**5 PIPE PENETRATION - WALL**

NOT TO SCALE

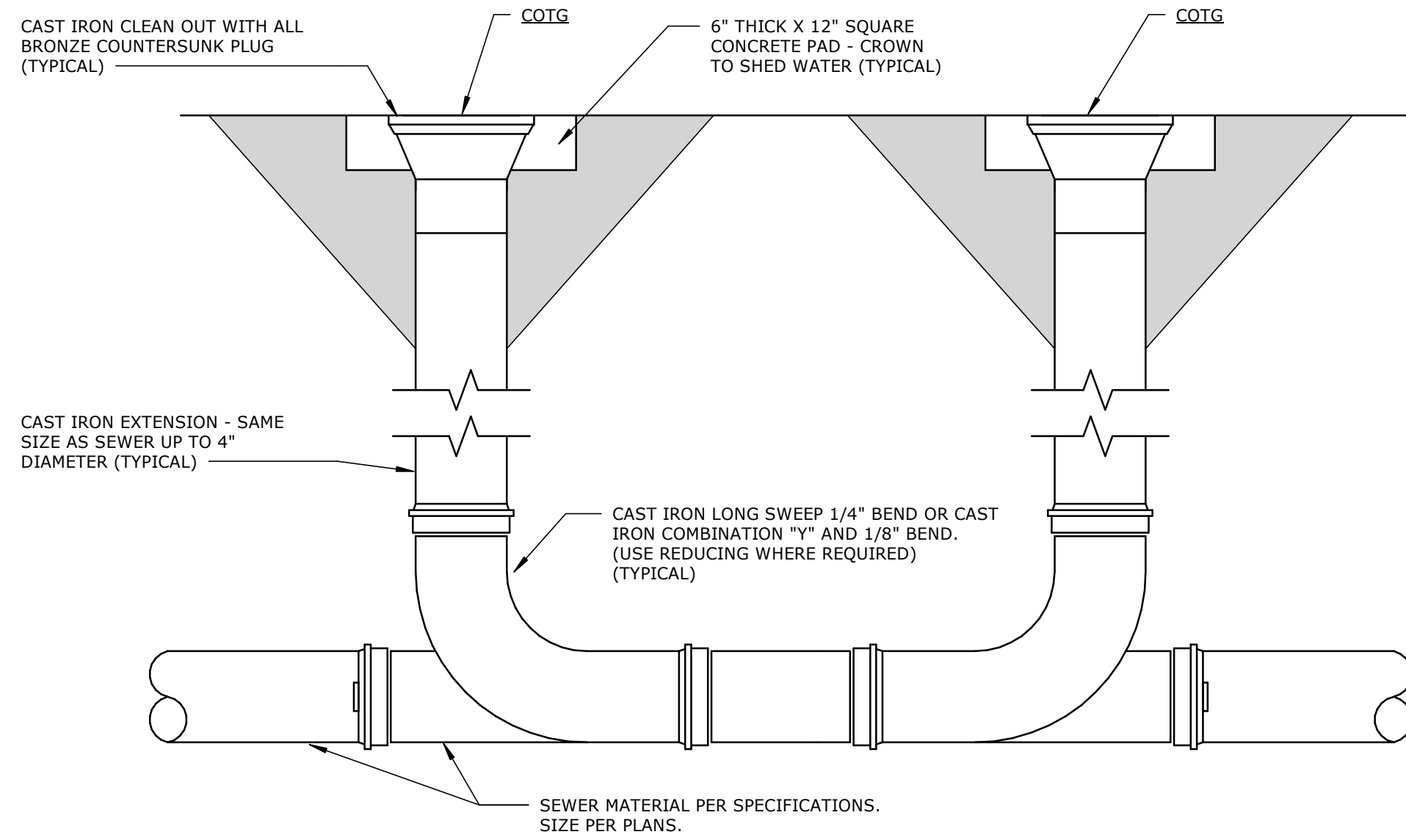


- NOTES:**
1. SEE SPECIFICATIONS FOR INSULATION, JACKET, AND HANGER REQUIREMENTS.

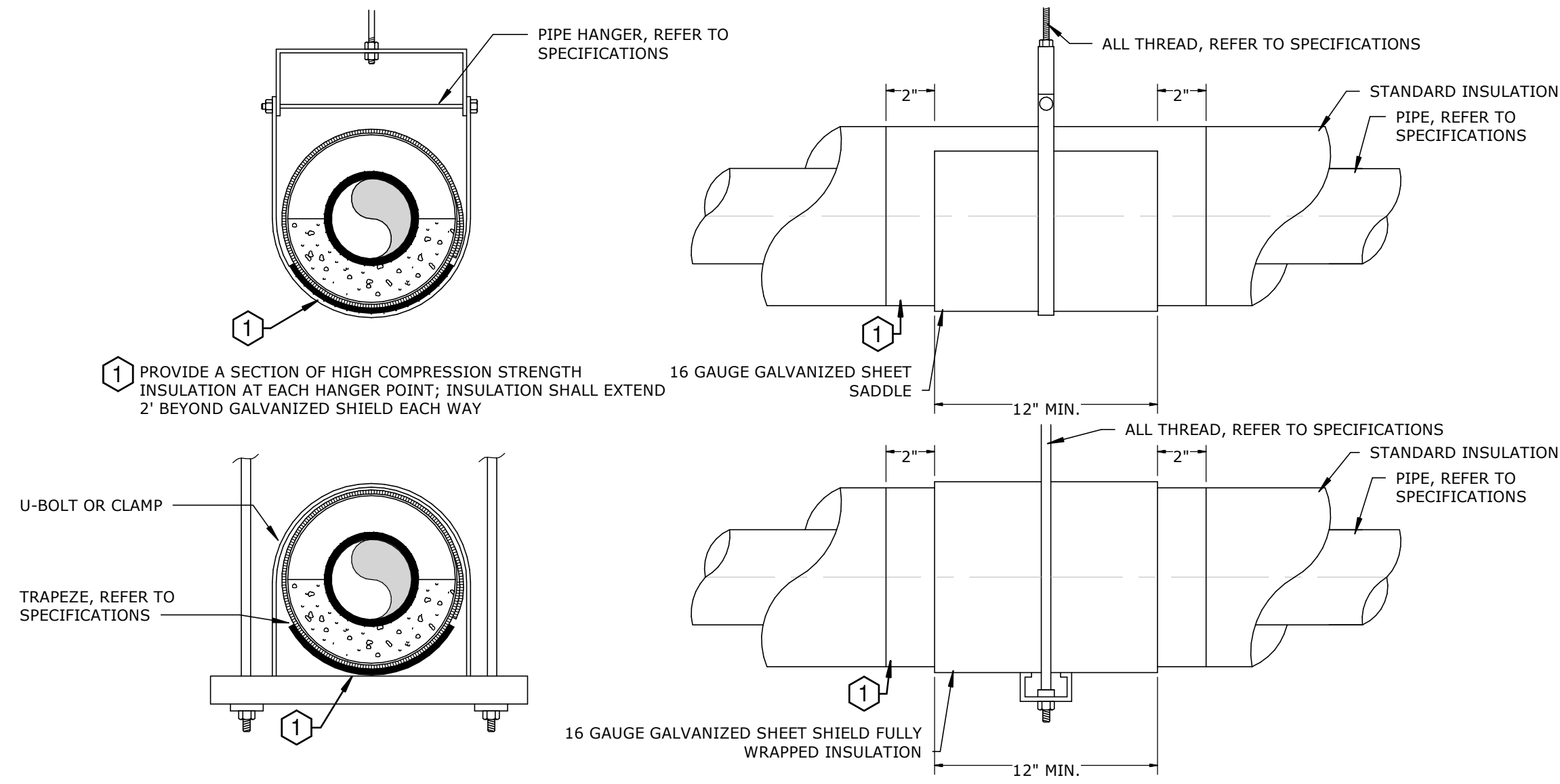
**6 PIPE INSULATION AT CLEVIS HANGER**

NOT TO SCALE

**GENERAL NOTE:** WHERE POSSIBLE, OFFSET COTG FITTINGS AWAY FROM BUILDING PERIMETER TO AVOID SIDEWALKS. ALL DCOTG LOCATIONS SHALL BE ACCESSIBLE FOR USE.



**1** DOUBLE CLEANOUT TO GRADE  
NOT TO SCALE



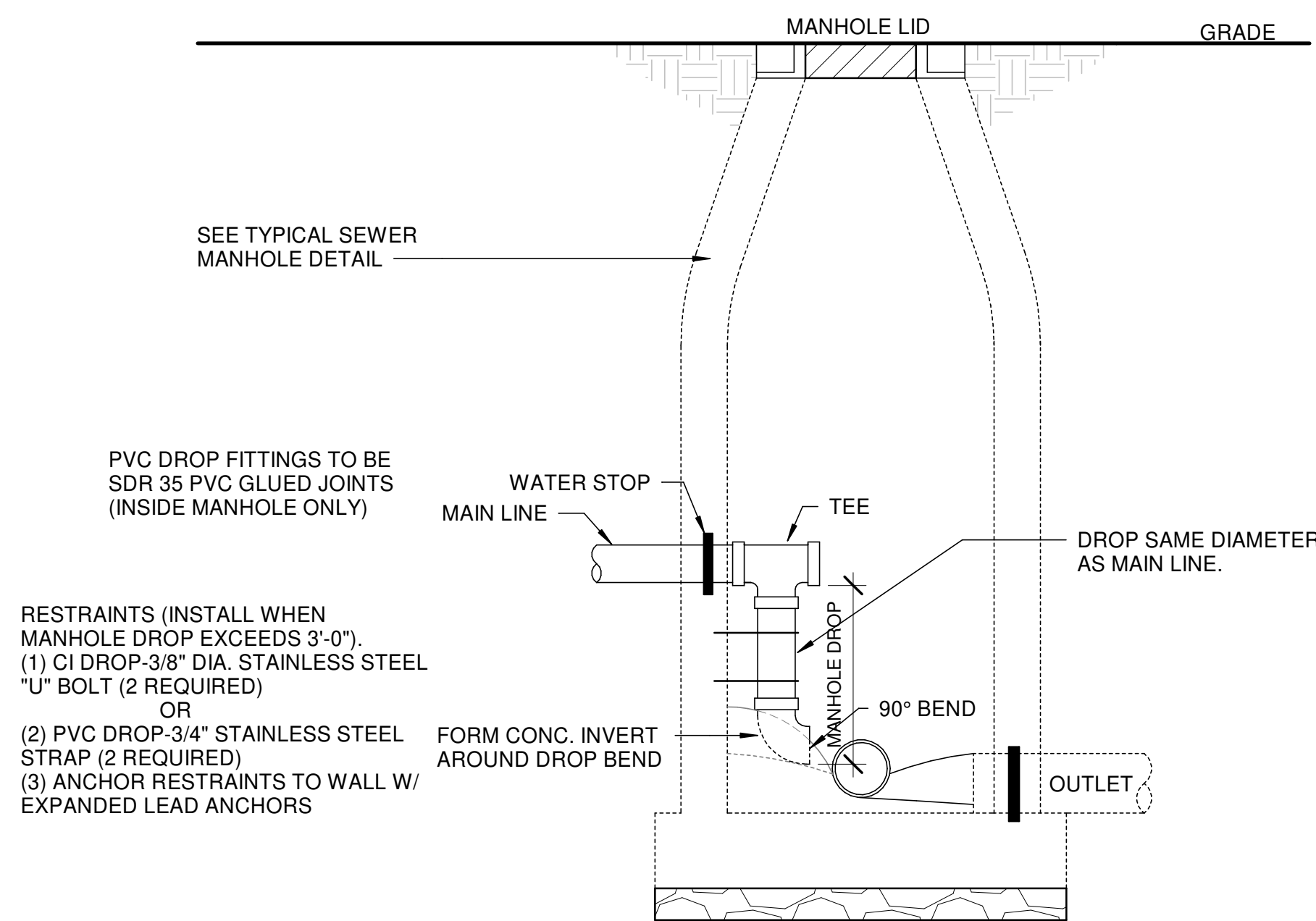
**2** INSULATED PIPE HANGER  
NOT TO SCALE

HAMMER ARRESTOR SCHEDULE		
SUPPLY BRANCH SIZE	PDI HAMMER ARRESTOR SIZE	FIXTURE UNITS
1/2" - 1"	A	1-11
1-1/4"	B	12-32
1-1/2"	C	33-60
2"	D	61-113
2-1/2"	E	114-154
3"	F	155-330

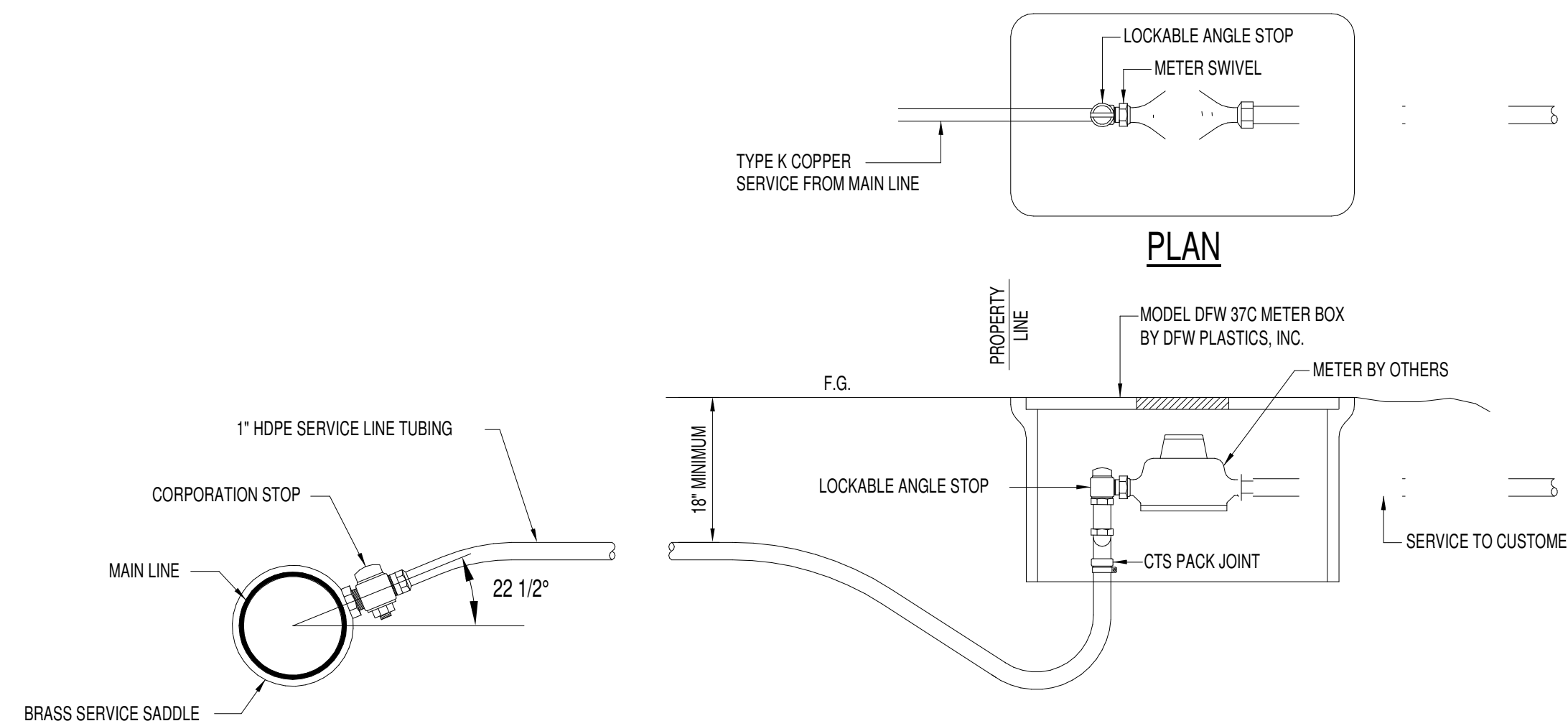
PLUMBING GROUP FIXTURES	C.W.F.U.	
	FLUSH TANK	FLUSH VALVE
1 TLT, 1 LAV	6.5	11.5
2 TLT, 2 LAV	13.5	23
1 TLT, 1 UR, 1 LAV	13	18
3 TLT, 3 LAV	19.5	34.5
2 TLT, 1 UR, 3 LAV	19.5	29.5
4 TLT, 4 LAV	26	46

- NOTES:**
- ALL BATHROOM GROUPS SHALL INCLUDE A MINIMUM OF ONE DCW ARRESTOR AND ONE DHW ARRESTOR SIZED PER HAMMER ARRESTOR SCHEDULE. ADDITIONAL ARRESTORS SHALL BE INSTALLED WHERE INDICATED.
  - ARRESTORS SHALL BE P.D.I.-WH201 APPROVED AND CERTIFIED.
  - ARRESTORS SHALL HAVE WROUGHT COPPER SHELL WITH THREADED CONNECTIONS AND HYDRO-PNEUMATIC AIR CUSHION.
  - PROVIDE ACCESS TO ARRESTORS.
  - FURNISH AND INSTALL WITH ISOLATION VALVES INDEPENDENT OF ASSEMBLY.

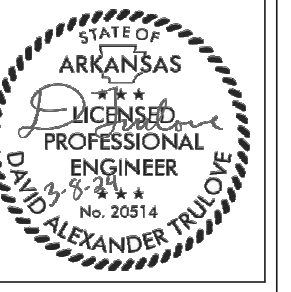
**3** WATER HAMMER ARRESTOR SCHEDULE  
NOT TO SCALE



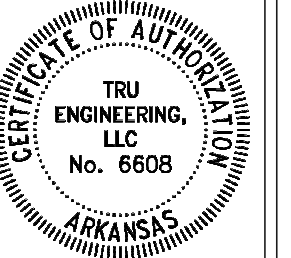
**4** SEWER DROP MANHOLE  
NOT TO SCALE



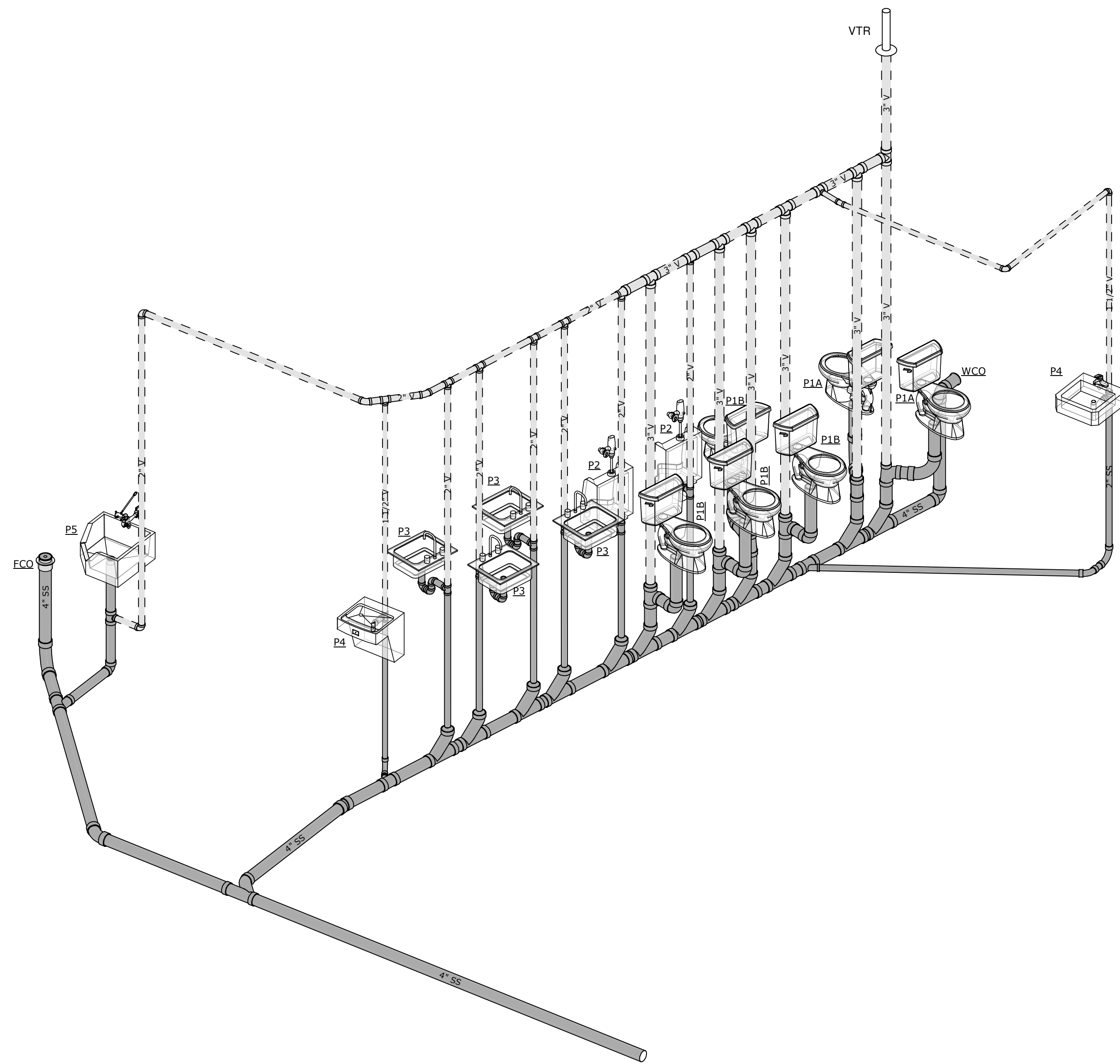
**5** WATER UTILITY CONNECTION  
NOT TO SCALE



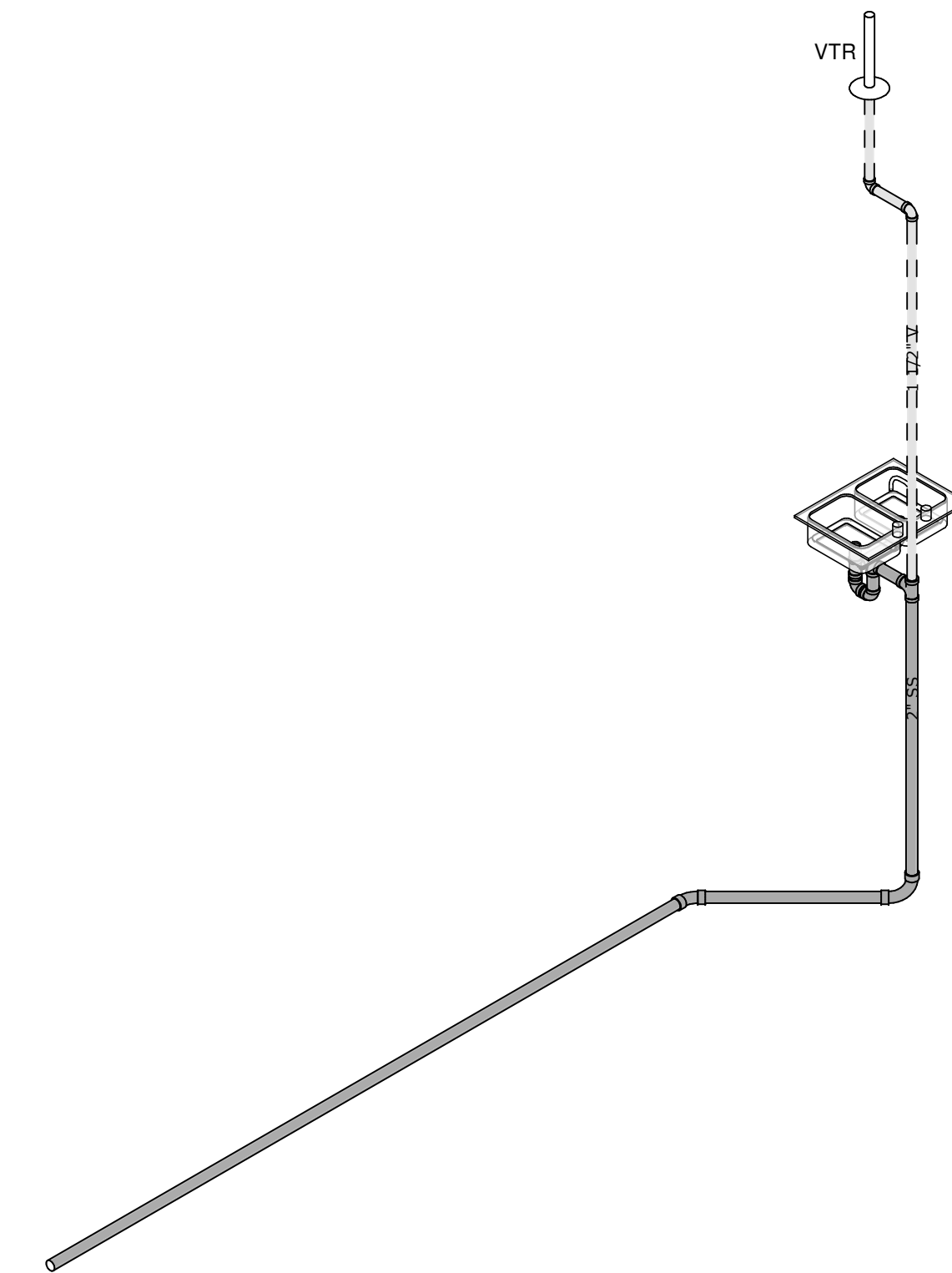
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ISSUE DATE: **March 1, 2024**  
REVISIONS:  
RE-BID  
**April 19, 2024**



1 MAIN RESTROOM SANITARY WASTE AND VENT RISER



2 KITCHENETTE SANITARY WASTE AND VENT RISER

**SANITARY RISER GENERAL NOTES**

- SANITARY RISERS ARE DIAGRAMMATIC. RISERS INDICATE GENERAL PIPE ROUTES AND SIZES FOR SYSTEM. CONTRACTOR SHALL PROVIDE ALL NECESSARY OFFSETS TO PROVIDE A FULLY FUNCTIONING SYSTEM.
- SOME P-TRAPS FOR FIXTURES ARE NOT SHOWN FOR CLARITY OF RISER. ALL PLUMBING FIXTURES WITH SANITARY CONNECTIONS SHALL BE PROVIDED WITH EITHER INTEGRAL OR ANCILLARY P-TRAPS.
- CONTRACTOR SHALL INSTALL ALL PLUMBING FIXTURES IN ACCORDANCE WITH ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION.
- CLOSELY COORDINATE ALL VTR ROOF PENETRATIONS WITH ABOVE CEILING DUCTWORK AND STRUCTURE. COORDINATE WITH ARCHITECT FOR FINAL LOCATION.

PLUMBING -- FIXTURE CONNECTION Ø				
TAG	DESCRIPTION	BRANCH CONNECTIONS		
		DCW	DHW	SS
DCOTG	CLEAN OUT TO GRADE			4"
FCO	FLOOR CLEANOUT			4"
P1A	WATER CLOSET - FLUSH TANK - ADA	1/2"		4"
P1B	WATER CLOSET - FLUSH TANK	1/2"		4"
P2	URINAL	3/4"		2"
P3	UNDERMOUNT LAVATORY	1/2"	1/2"	2"
P4	ADA WALL MOUNT LAVATORY	1/2"		2"
P5	MOP SINK - CORNER	1/2"	1/2"	3"
P6	KITCHEN SINK - DOUBLE COMPARTMENT	1/2"	1/2"	2"
WB	MINI-ICE MAKER WALL BOX - STAINLESS	1/2"		2"
WCO	WALL CLEANOUT			4"

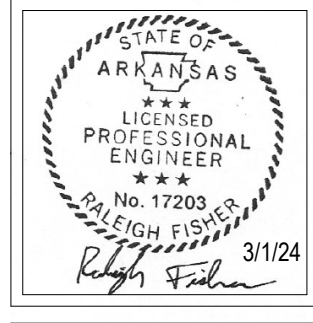
GENERAL NOTES
<p><b>1) GENERAL:</b>  1A)ENGINEER: REFERENCES ON THE STRUCTURAL DRAWINGS TO 'ENGINEER' MEAN THE STRUCTURAL ENGINEER OF RECORD. OTHER ENTITIES ARE SPECIFICALLY NOTED AS "CONTRACTOR'S ENGINEER", "MECHANICAL ENGINEER", ETC.</p> <p>1B) UNDERGROUND UTILITIES: LOCATE EXISTING UTILITIES AND NOTIFY ARCHITECT OF EXISTING UTILITIES OR SUBGRADE CONDITIONS WHICH INTERFERE WITH WORK.</p> <p>1C)STRUCTURAL ELEMENTS ARE CENTERED ON GRID LINES AND GRID LINE INTERSECTIONS UNLESS DIMENSIONED OTHERWISE.</p> <p><b>2) EXISTING STRUCTURES:</b>  2A)CONTRACT DOCUMENTS HAVE BEEN PREPARED USING AVAILABLE DRAWINGS AND SITE OBSERVATION AS PERMITTED BY ACCESS RESTRICTIONS DURING DESIGN.</p> <p>2B)DURING CONSTRUCTION, THE CONTRACTOR MAY ENCOUNTER EXISTING CONDITIONS WHICH ARE NOT KNOWN OR ARE AT VARIANCE WITH PROJECT DOCUMENTATION. CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ALL CONDITIONS NOT PER THE CONTRACT DOCUMENTS. EXAMPLES INCLUDE:  - SIZES OR DIMENSIONS OTHER THAN THOSE SHOWN  - DAMAGE OR DETERIORATION TO MATERIALS AND COMPONENTS  - CONDITIONS OF INSTABILITY OR LACK OF SUPPORT  - ITEMS NOTED AS EXISTING ON THE DRAWINGS BUT NOT FOUND IN THE FIELD</p> <p>2C)PREPARE DIMENSIONAL DRAWINGS OF ALL DISCOVERED ITEMS.</p> <p>2D)CONTRACTOR SHALL FIELD VERIFY ALL EXISTING STRUCTURAL CONDITIONS PRIOR TO SUBMITTING SHOP DRAWINGS.</p> <p>2E) CONTRACTOR SHALL MAKE ALLOWANCE FOR THE RESOLUTION OF SUCH DISCOVERIES IN THE CONSTRUCTION SCHEDULE.</p> <p><b>3) USE OF DRAWINGS:</b>  3A)DO NOT SCALE DRAWINGS.</p> <p>3B)DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.</p> <p>3C)DETAILS NOTED TYPICAL APPLY TO ALL SIMILAR CONDITIONS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ELSEWHERE ON THE PROJECT.</p> <p>3D)WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES AND SPECIFICATIONS:  - CONTACT THE ARCHITECT PRIOR TO PROCEEDING WITH CONSTRUCTION  - THE MORE STRINGENT REQUIREMENTS SHALL GOVERN FOR BIDDING / PRICING</p> <p><b>4) TEMPORARY CONDITIONS:</b>  4A)THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL TEMPORARY BRACING AND/OR SUPPORT THAT MAY BE REQUIRED AS THE RESULT OF THE CONTRACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCES. REFER TO "LATERAL LOAD RESISTING SYSTEM DESCRIPTION" IN DESIGN CRITERIA FOR ADDITIONAL INFORMATION.</p> <p>4B) CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.</p> <p>4C)FOUNDATION WALLS SHALL NOT BE BACKFILLED UNTIL THE SLABS-ON-GRADE AND UPPER SLABS ARE IN-PLACE AND REACH FULL STRENGTH UNLESS ADEQUATE BRACING IS PROVIDED. USE ONLY HAND OPERATED TOOLS FOR COMPACTION ADJACENT TO FOUNDATION WALLS AND GRADE BEAMS. GRADE BEAMS SHALL BE BACKFILLED EVENLY ON BOTH SIDES.</p> <p><b>5) SUBMITTALS AND SUBSTITUTIONS:</b>  5A)SUBMITTALS: REFER TO SPECIFICATIONS FOR DETAILED REQUIREMENTS.  - IF THE CONTRACTOR REQUESTS A CHANGE FROM THE STRUCTURAL DRAWINGS, IT SHALL BE APPROVED BY THE ARCHITECT AND DESIGNED BY CONTINUUM ENGINEERING LLC PRIOR TO SUBMITTING SHOP DRAWINGS. VARIATION SHALL BE INDICATED ON THE SHOP DRAWINGS. CONTRACTOR SHALL COMPENSATE CONTINUUM ENGINEERING LLC FOR MAKING THE CHANGE.  - CONSTRUCTION DOCUMENTS SHALL NOT BE REPRODUCED FOR USE IN SUBMITTALS  - ALL SHOP DRAWINGS SHALL REFERENCE THE STRUCTURAL DRAWING NUMBER AND DETAIL USED TO PREPARE THE SUBMITTAL  - SUBMIT A STATEMENT OF RESPONSIBILITY FOR CONSTRUCTION OF THE LATERAL LOAD RESISTING SYSTEM IDENTIFIED IN THE DESIGN CRITERIA IN ACCORDANCE WITH IBC 2015 SECTION 1704</p> <p>5B)SUBSTITUTIONS: ARCHITECT'S APPROVAL SHALL BE SECURED FOR ALL SUBSTITUTIONS</p> <p>5C)NONCONFORMANCE: NOTIFY ARCHITECT OF CONDITIONS NOT CONSTRUCTED PER THE CONTRACT DOCUMENTS PRIOR TO PROCEEDING WITH CORRECTIVE WORK. SUBMIT PROPOSED REPAIR TO THE ARCHITECT FOR ACCEPTANCE. CONTRACTOR SHALL COMPENSATE CONTINUUM ENGINEERING LLC FOR DESIGNING THE REPAIR.</p> <p>5D)ALL SHOP DRAWINGS SHALL BE SUBMITTED IN 24x36, 11x17 AND 8-1/2x11 FORMAT ONLY.</p> <p>5E)ALL SHOP DRAWINGS SHALL BE SUBMITTED IN ELECTRONIC FORMAT ONLY.</p> <p><b>6) OSHA STANDARDS:</b>  6A)THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION. NOTHING SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE CONSTRUED AS ELIMINATING THE NEED FOR THE CONTRACTOR TO COMPLY WITH ALL OSHA REQUIREMENTS.</p> <p>6E)WHERE THE STRUCTURAL DRAWINGS APPEAR TO CONFLICT WITH OSHA REQUIREMENTS, THE STRUCTURAL DRAWINGS REPRESENT FINAL CONDITIONS ONLY. THE CONTRACTOR SHALL ADD ALL ERECTION FRAMING NECESSARY TO COMPLY WITH OSHA.</p> <p><b>8) COORDINATION:</b>  8A)STRUCTURAL DRAWINGS ARE NOT STAND-ALONE DOCUMENTS AND ARE INTENDED TO BE USED IN CONJUNCTION WITH CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND DRAWINGS FROM OTHER DISCIPLINES. THE CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS INTO SHOP DRAWINGS AND WORK.</p> <p>8B)COORDINATE DIMENSIONS OF ALL OPENINGS, BLOCKOUTS, DEPRESSIONS, ETC., WITH ARCHITECTURAL DRAWINGS, DRAWINGS FROM OTHER DISCIPLINES, AND FIELD CONDITIONS PRIOR TO SHOP DRAWING SUBMITTAL.</p>

DESIGN CRITERIA
<p><b>1) CODES AND STANDARDS:</b>  1A) GENERAL DESIGN  - INTERNATIONAL BUILDING CODE 2021</p> <p><b>2) SEISMIC LOADS</b>  - SEISMIC DESIGN CATEGORY = E  - RISK CATEGORY = II  - EARTHQUAKE IMPORTANCE FACTOR, <math>I_e = 1.00</math>  - MAPPED SPECTRAL RESPONSE ACCELERATION, <math>S_s = 2.354 \text{ %g}</math>  - MAPPED SPECTRAL RESPONSE ACCELERATION, <math>S_1 = 0.856 \text{ %g}</math>  - DESIGN SPECTRAL RESPONSE COEFFICIENT, <math>SD_s = 1.569</math>  - DESIGN SPECTRAL RESPONSE COEFFICIENT, <math>SD_1 = N/A</math>  - SOIL SITE CLASS = D  - BASIC STRUCTURAL SYSTEM: LOAD BEARING COLD-FORMED STEEL FRAMING  - STRUCTURAL SEISMIC LATERAL SYSTEM: LIGHT FRAME (CFS) WALLS WITH WOOD PANELS  - RESPONSE MODIFICATION FACTOR, <math>R = 6.5</math>  - SEISMIC RESPONSE COEFFICIENT, <math>C_s = 0.030</math>  - SYSTEM OVERSTRENGTH FACTOR, <math>\Omega = 2.5</math>  - DESIGN BASE SHEAR EAST-WEST DIRECTION = 0.5 K  - DESIGN BASE SHEAR NORTH-SOUTH DIRECTION = 0.5 K  - SEISMIC ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE SIMPLIFIED ANALYSIS</p> <p><b>3) WIND LOADS</b>  - RISK CATEGORY = II  - BASIC ULTIMATE WIND SPEED, <math>V_{ult} = 106 \text{ MPH}</math>  - BASIC NOMINAL WIND SPEED, <math>V_{asd} = 82 \text{ MPH}</math>  - EXPOSURE CATEGORY = C  - INTERNAL PRESSURE COEFFICIENT, <math>C_{p,i} = +/-0.18</math>  - TOPOGRAPHIC FACTOR, <math>K_{zt} = 1.0</math></p> <p><b>4) LATERAL LOAD RESISTING SYSTEM DESCRIPTION:</b>  - PLYWOOD DIAPHRAGM OVER SHEAR WALLS COMPOSED OF LIGHT FRAME (CFS) AND WOOD PANELS</p> <p><b>5) GRAVITY LOADS</b>  5A)DEAD LOAD OF ROOF = 10 PSF</p> <p>5B) FLOOR LIVE LOAD = 100 PSF</p> <p>5C) ROOF LIVE LOAD = 20 PSF</p> <p>5B)DRIFTING, SLIDING AND UNBALANCED SNOW  - GROUND SNOW LOAD = 10.0 PSF  - SNOW EXPOSURE FACTOR, <math>C_e = 1.0</math>  - SNOW LOAD IMPORTANCE FACTOR, <math>I_s = 1.0</math>  - THERMAL FACTOR, <math>C_t = 1.00</math>  - FLAT ROOF SNOW LOAD, <math>P_f = 10.0 \text{ PSF}</math></p>
FOUNDATION NOTES
<p>MAXIMUM TOTAL LOAD BEARING PRESSURE = 1,500 PSF</p> <p>PREPARE SOILS TO MEET BEARING PRESSURE</p>
STEEL NOTES
<p><b>1) STRUCTURAL COLD FORMED METAL FRAMING:</b>  1A)REFER TO SCHEDULE FOR REQUIRED STUD AND JOIST MATERIAL GRADES AND SECTION PROPERTIES. REFER TO DETAILS FOR CONNECTIONS AND OTHER REQUIREMENTS.</p> <p>1B)LOAD BEARING METAL FRAMING:  - MAXIMUM GAP BETWEEN WALL STUDS AND TRACK SHALL BE 1/8". SHIM AS REQUIRED TO ACHIEVE THIS CRITERIA.  - ALL BRACING, BRIDGING, AND CONNECTIONS SHALL BE COMPLETE PRIOR TO PLACING CONCRETE SLABS OR INSTALLING ROOF FRAMING ABOVE.</p>
WOOD NOTES
<p><b>1) SHEATHING:</b>  1A)PLYWOOD:  - CONFORM TO U.S. DEPARTMENT OF COMMERCE STANDARD PS 1-10.</p>

CONCRETE NOTES																				
<p><b>1) GENERAL:</b>  1A)ALL WORK SHALL CONFORM WITH ACI 301, UNLESS NOTED OTHERWISE IN DRAWINGS OR PROJECT SPECIFICATIONS.</p> <p>1B)DETAIL BARS IN ACCORDANCE WITH THE DRAWINGS, PROJECT SPECIFICATIONS, AND ACI PUBLICATION SP-66 (2004): "ACI DETAILING MANUAL"</p> <p><b>2) REINFORCING MATERIALS:</b>  2A)SEE 'REINFORCING MATERIAL TABLE'</p> <p><b>3) REINFORCING FABRICATION:</b>  3A)SPICES:  - NO SPLICING OF REINFORCEMENT PERMITTED EXCEPT AS NOTED ON DRAWINGS. MAKE BARS CONTINUOUS AROUND CORNERS WHERE DETAIL NOT PROVIDED. WHERE PERMITTED, SPLICES MAY BE MADE BY CONTACT LAPS OR MECHANICAL CONNECTORS.  - SEE 'LAP SPICE SCHEDULE' FOR LAP LENGTHS.  - SPLICE CONTINUOUS TOP AND BOTTOM BARS IN WALLS, BEAMS, AND GRADE BEAMS 'LTS' UNLESS NOTED OTHERWISE.  - SPLICE TOP BARS AT MIDSPAN AND BOTTOM BARS OVER SUPPORT UNLESS NOTED OTHERWISE.</p> <p>3B)MISCELLANEOUS REINFORCING REQUIREMENTS:  - PROVIDE ADDITIONAL BARS OR STIRRUPS REQUIRED TO SECURE REINFORCING IN PLACE DURING CONCRETE PLACEMENT.  - MAKE ALL REINFORCING BAR BENDS IN THE FABRICATOR'S SHOP UNLESS NOTED.  - NO WELDING OF REINFORCING PERMITTED UNLESS NOTED ON DRAWINGS. WHERE PERMITTED, PERFORM WELDING IN ACCORDANCE WITH AWS D1.4-2011.  - PROVIDE ADDED REINFORCING TO TRIM ALL OPENINGS, NOTCHES, AND REENRANT CORNERS AS NOTED IN TYPICAL DETAILS.</p> <p><b>4) STRUCTURAL CONCRETE MIX REQUIREMENTS:</b>  4A)SEE 'CONCRETE MIX TABLE'</p> <p><b>5) SLAB-ON-GRADE:</b>  5A)VERIFY ALKALINITY OF CONCRETE SURFACE, SLAB VAPOR TRANSMISSION, AND SLAB FLATNESS/LEVELNESS ARE COMPATIBLE WITH FLOORING SYSTEM AND ADHESIVES PRIOR TO INSTALLING FLOORING.</p> <p>5B) TAKE PRECAUTIONS TO MINIMIZE SLAB CURLING. GRIND SLAB OR USE LEVELING COMPOUND IF FLOOR FLATNESS AND LEVELNESS VALUES ARE NOT ACCEPTABLE TO THE ARCHITECT.</p> <p><b>6) NON-SHRINK GROUT:</b>  6A)CONFORM TO ASTM C1107</p> <p>6B)ACHIEVE 8000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.</p> <p><b>7) PLACING REINFORCEMENT:</b>  7A)REINFORCEMENT PROTECTION:  - SEE 'REBAR COVER TABLE'  - SEE ACI 117-10 FOR REINFORCEMENT PLACING TOLERANCES</p> <p>7B)PROVIDE ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING AND WELDED WIRE REINFORCEMENT AT POSITIONS SHOWN ON PLANS. ALL REINFORCING, DOWELS, BOLTS, AND EMBEDDED PLATES SHALL BE SET AND TIED IN PLACE BEFORE THE CONCRETE IS POURED. "STABBING" INTO PREVIOUSLY PLACED CONCRETE IS NOT PERMITTED.</p>																				
REINFORCING MATERIAL TABLE																				
<table border="1"> <thead> <tr> <th>REINF ELEMENT</th> <th>ASTM</th> <th>Fy (KSI)</th> <th>Fu (KSI)</th> <th>COMMENTS</th> </tr> </thead> <tbody> <tr> <td>TYP REINFORCING</td> <td>A615</td> <td>60</td> <td>90</td> <td>-</td> </tr> <tr> <td>WELDED &amp; FIELD BENT REINF</td> <td>A706</td> <td>60</td> <td>80</td> <td>-</td> </tr> <tr> <td>WELDED WIRE REINFORCING, SMOOTH</td> <td>A1064</td> <td>65</td> <td>75</td> <td>-</td> </tr> </tbody> </table>	REINF ELEMENT	ASTM	Fy (KSI)	Fu (KSI)	COMMENTS	TYP REINFORCING	A615	60	90	-	WELDED & FIELD BENT REINF	A706	60	80	-	WELDED WIRE REINFORCING, SMOOTH	A1064	65	75	-
REINF ELEMENT	ASTM	Fy (KSI)	Fu (KSI)	COMMENTS																
TYP REINFORCING	A615	60	90	-																
WELDED & FIELD BENT REINF	A706	60	80	-																
WELDED WIRE REINFORCING, SMOOTH	A1064	65	75	-																
CONCRETE MIX TABLE																				
<table border="1"> <thead> <tr> <th>CONC MIX TYPE</th> <th>INTENDED USE</th> <th>28 DAY STRENGTH f<sub>c</sub> (KSI)</th> <th>CONC WEIGHT</th> <th>MAX W/C RATIO, INCLUDING FLY ASH</th> <th>MAX AGGREGAT E SIZE (IN)</th> <th>TOTAL AIR CONTENT (%)</th> <th>OTHER REQTS</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>ALL CONCRETE SHOWN IN DRAWINGS</td> <td>4</td> <td>NWC</td> <td>0.5</td> <td>3/4"</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <p><b>CONCRETE MIX TABLE NOTES:</b>  PROPORTIONS OF MATERIALS IN CONCRETE MIX SHALL BE ESTABLISHED TO:  - PROVIDE THE MINIMUM COMPRESSIVE STRENGTH AS INDICATED IN THE MIX TABLE. DO NOT EXCEED THE MAXIMUM WATER-CEMENT RATIO NOTED.  - PROVIDE WORKABILITY AND CONSISTENCY TO PERMIT CONCRETE TO BE WORKED READILY INTO FORMS AND AROUND REINFORCEMENT UNDER CONDITIONS OF PLACEMENT TO BE EMPLOYED, WITHOUT SEGREGATION OR EXCESSIVE BLEEDING. CONTRACTOR SHALL SELECT APPROPRIATE SLUMP. USE ADMIXTURES AS REQUIRED TO OBTAIN DESIRED RESULTS.</p> <p>USE TYPE I / II PORTLAND CEMENT</p>	CONC MIX TYPE	INTENDED USE	28 DAY STRENGTH f <sub>c</sub> (KSI)	CONC WEIGHT	MAX W/C RATIO, INCLUDING FLY ASH	MAX AGGREGAT E SIZE (IN)	TOTAL AIR CONTENT (%)	OTHER REQTS	1	ALL CONCRETE SHOWN IN DRAWINGS	4	NWC	0.5	3/4"	-	-				
CONC MIX TYPE	INTENDED USE	28 DAY STRENGTH f <sub>c</sub> (KSI)	CONC WEIGHT	MAX W/C RATIO, INCLUDING FLY ASH	MAX AGGREGAT E SIZE (IN)	TOTAL AIR CONTENT (%)	OTHER REQTS													
1	ALL CONCRETE SHOWN IN DRAWINGS	4	NWC	0.5	3/4"	-	-													

DEFERRED SUBMITTAL NOTES
<p><b>1) GENERAL:</b>  1A)THE FOLLOWING PORTIONS OF THE STRUCTURAL DESIGN WILL NOT BE SUBMITTED AT THE TIME OF PERMIT APPLICATION. WHEN RECEIVED AND REVIEWED, THESE DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL BY THE CONTRACTOR:  - ARCHITECTURAL/METAL CLADDING PANEL  - METAL RAILINGS  - ANCHORAGE, BRACING AND ATTACHMENT OF REQUIRED ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, FIRE SPRINKLER, AND OTHER EQUIPMENT AND SYSTEMS.  - GRAIN BIN MODIFICATIONS</p> <p>1B) CONNECTION OF DEFERRED SUBMITTAL ITEMS TO PRIMARY STRUCTURE BY DEFERRED SUBMITTAL SUPPLIER. DEFERRED SUBMITTAL SUPPLIER TO PROVIDE CONNECTIONS AND FRAMING ARRANGEMENT TO AVOID LOADING WHICH EXCEEDS THE CAPACITY OF THE ELEMENT BEING ATTACHED TO. REFERENCE LOAD MAPS FOR MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SPRINKLER LOAD ALLOWANCES.</p> <p>1C)ALL DEFERRED SUBMITTALS TO BE ATTACHED TO PRIMARY STRUCTURE WITH A PINNED CONNECTION. MOMENT CONNECTIONS TO PRIMARY STRUCTURE NOT PERMITTED UNLESS NOTED ON DRAWINGS OR APPROVED BY ENGINEER IN WRITING PRIOR TO SUBMITTAL OF DRAWINGS OR CALCULATIONS.</p> <p>1D)LOADING AND LOCATION FOR ATTACHMENT OF DEFERRED SUBMITTAL ITEMS ARE NOTED ON DRAWINGS AND ARE NOT TO BE RELOCATED OR INCREASED WITHOUT WRITTEN APPROVAL.</p> <p>1E)GC / METAL STUD FRAMING DESIGNER / CLADDING DESIGNER COORDINATION:  - METAL STUD FRAMING AND FRAMING ATTACHMENT IS DESIGNED FOR THE TRIBUTARY WIND AND GRAVITY LOAD OF THE STUD SPACING. CLADDING SUPPLIER TO DESIGN CLADDING TO ATTACH AT EACH STUD. CLADDING ATTACHMENT SPACING WHICH EXCEEDS THE STUD SPACING IS NOT ACCEPTABLE WITHOUT APPROVAL FROM THE METAL STUD SUPPLIER/DESIGNER AND THE PROJECT EOR.  - IF THE CLADDING SUPPLIER DOES NOT WANT OR CANNOT ATTACH TO EACH STUD THE LOADS FROM THE CLADDING SUPPLIER MUST BE PROVIDED TO THE METAL STUD FRAMING SUPPLIER. THE METAL STUD FRAMING SUPPLIER WILL NEED TO INCORPORATE THESE LOADS INTO THE METAL STUD FRAMING DESIGN.  - GC TO COORDINATE BETWEEN METAL STUD FRAMING SUPPLIER AND CLADDING SUPPLIER AS REQUIRED.</p> <p>1F) FLOOR FRAMING AND EDGE ANGLE ARE DESIGNED TO SUPPORT ONE LEVEL OF CURTAIN WALL OR METAL STUD WALL FRAMING. SUPPORTING MULTIPLE LEVELS OF CURTAIN WALL OR METAL STUD WALL FROM ONE FLOOR LEVEL IS NOT PERMITTED.</p> <p>1G)WALLS, GRADE BEAMS AND THE UNDERSIDE OF CONCRETE ON METAL DECK SHALL BE CONSIDERED CRACKED FOR THE PURPOSE OF DESIGNING ANCHORS FOR ATTACHMENT OF DEFERRED SUBMITTAL ITEMS.</p> <p>1H)SUBMIT STAMPED STRUCTURAL CALCULATIONS FOR ALL DEFERRED SUBMITTAL ITEMS PRIOR TO OR CONCURRENTLY WITH DRAWINGS OR PRODUCT DATA. INCLUDE ANALYSIS OF ATTACHMENT TO PRIMARY STRUCTURE. INCLUDE CURRENT ICC REPORT WITH ALL PROPRIETARY STRUCTURAL ELEMENTS AND ANCHORS/FASTENERS.</p> <p>1I) POWDER ACTUATED FASTENERS (PAF) INTO CONCRETE OR CMU SHALL NOT BE USED TO RESIST TENSION LOADS. POWDER ACTUATED FASTENERS SHALL NOT BE USED TO RESIST GRAVITY LOADS WHICH INCLUDE BRICK VENEER.</p>





QUALITY ASSURANCE GENERAL NOTES	
STATEMENT OF STRUCTURAL SPECIAL INSPECTIONS AND TESTING	
<p>1) <b>GENERAL:</b></p> <p>1A) <b>SCOPE OF WORK</b></p> <ul style="list-style-type: none"> <li>- THE OWNER WILL ENGAGE A QUALIFIED INSPECTION AND TESTING AGENCY(S) TO PERFORM SPECIAL INSPECTIONS AND TESTING FOR ALL STRUCTURAL MEMBERS AND ASSEMBLIES AS NOTED HEREIN.</li> <li>- SPECIAL INSPECTIONS ARE IN ADDITION TO INSPECTIONS BY THE AUTHORITY HAVING JURISDICTION REQUIRED BY IBC 2021 SECTION 110 AND PPRBC 2017.</li> <li>- REFER TO THE SPECIFICATIONS FOR REPORTING AND PROCEDURAL REQUIREMENTS FOR QUALITY ASSURANCE AND QUALITY CONTROL.</li> <li>- REFER TO ARCHMECHELECCIVIL SPECIFICATIONS AND DRAWINGS FOR ADDITIONAL SPECIAL INSPECTION AND TESTING THAT MAY BE REQUIRED.</li> <li>- SPECIAL INSPECTIONS AND TESTING ARE APPLICABLE TO ALL REVISIONS AND/OR FUTURE WORK ADDED BY AMENDMENTS TO THESE DOCUMENTS.</li> </ul> <p>1B) <b>DEFINITIONS</b></p> <ul style="list-style-type: none"> <li>- SPECIAL INSPECTOR: THE AGENCY ENGAGED BY THE OWNER AND APPROVED BY THE AUTHORITY HAVING JURISDICTION TO ACT AS THE DESIGNATED REPRESENTATIVE TO PERFORM INSPECTIONS.</li> <li>- SPECIAL INSPECTION: INSPECTION PERFORMED BY THE SPECIAL INSPECTOR ACCORDING TO IBC 2021 SECTION 1704 AND PPRBC TO ENSURE COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS.</li> <li>- (P) PERIODIC INSPECTION: THE PART-TIME OR INTERMITTENT OBSERVATION BY THE SPECIAL INSPECTOR OF WORK BEING PERFORMED. SPECIAL INSPECTOR SHALL BE PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. OBSERVATION OF ALL WORK (100% VISUAL) SHALL BE MADE AT THE COMPLETION OF THE WORK.</li> <li>- (C) CONTINUOUS INSPECTION: THE FULL-TIME OBSERVATION BY THE SPECIAL INSPECTOR OF WORK BEING PERFORMED. SPECIAL INSPECTOR SHALL BE PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. OBSERVATION OF ALL WORK (100% VISUAL) SHALL BE MADE AT THE COMPLETION OF THE WORK.</li> </ul> <p>1C) <b>DEFICIENCIES IN WORK</b></p> <ul style="list-style-type: none"> <li>- CORRECT DEFICIENCIES IN WORK THAT TESTS AND INSPECTIONS INDICATE DO NOT COMPLY WITH THE CONTRACT DOCUMENTS AND REFERENCED STANDARDS.</li> <li>- ALL COST OF ADDITIONAL TESTING AND/OR INSPECTIONS FOR CORRECTIVE WORK SHALL BE BORNE BY THE CONTRACTOR.</li> </ul> <p>2) <b>SHOP FABRICATIONS:</b></p> <p>2A) <b>GENERAL</b></p> <ul style="list-style-type: none"> <li>- PERFORM INSPECTIONS AND TESTING FOR ALL SHOP FABRICATED STRUCTURAL MEMBERS AND ASSEMBLIES AS NOTED HEREIN.</li> <li>- SPECIAL INSPECTOR SHALL PERFORM SPECIAL INSPECTIONS AND TESTING UNLESS THE FABRICATOR IS REGISTERED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION OR FABRICATION HAS A CURRENT ICC-ES EVALUATION REPORT.</li> <li>- SPECIAL INSPECTOR SHALL VERIFY THE FABRICATOR MAINTAINS AND FOLLOWS DETAILED SHOP FABRICATION AND QUALITY CONTROL PROCEDURES, UNLESS FABRICATOR IS REGISTERED AND APPROVED.</li> <li>- AT THE COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE AUTHORITY HAVING JURISDICTION ACCORDING TO IBC 2015 SECTION 1704.2.5.1.</li> <li>- APPROVED FABRICATORS MAY PERFORM TESTING NOTED HEREIN EXCEPT THAT NONDESTRUCTIVE TESTING (NDT) SHALL ONLY BE PERFORMED BY PERSONNEL WITH QUALIFICATIONS THAT MEET OR EXCEED THE CRITERIA OF AWS D1.1 SUBCLAUSE 6.14.6 AND AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (ASNT) SNT-TC-1A OR ASNT CP-189.</li> </ul> <p>2B) <b>SHOP FABRICATIONS INCLUDED</b></p> <ul style="list-style-type: none"> <li>- SHOP FABRICATED COLD FORMED STEEL ELEMENTS</li> </ul>	

STRUCTURAL COLD FORMED STEEL SPECIAL INSPECTIONS				
ITEM	FREQUENCY	STANDARD	CRITERIA	
<b>FRAMING</b>				
- MEMBERS AND CONNECTIONS	P	-	VERIFY TYPE, SIZE, LOCATION, SPACING	
- BRIDGING AND BLOCKING	P	-	VERIFY TYPE, LOCATION, AND ATTACHMENT	
- FIELD CUTS AND NOTCHES	P	-	NO CUTS OR NOTCHES THROUGH SECTION FLANGES PERMITTED	
- SPLICING	P	-	NO SPLICING OF STRUCTURAL MEMBERS PERMITTED UNLESS SPECIFIED ON THE CONSTRUCTION DOCUMENTS	
- PUNCHOUTS	P	-	VERIFY SPACING REQUIREMENTS FROM BEARINGS AND CONNECTIONS AND REINFORCING IS USED WHERE REQUIRED	
- LOAD-BEARING WALL FRAMING	P	-	VERIFY STUD SEATED TIGHTLY WITHIN THE TOP AND BOTTOM TRACK WITH GAP NOT EXCEEDING PERMITTED DIMENSION, WHERE GAP IS EXCEEDED VERIFY SHIMS ARE PROVIDED	
- FLOOR/ROOF FRAMING	P	-	VERIFY FRAMING IS ALIGNED OVER A BEARING STUD WITHIN PERMITTED DIMENSION	
<b>SHEATHED SHEAR WALL</b>				
- PANEL SHEATHING	P	-	VERIFY TYPE AND THICKNESS	
- ATTACHMENT	P	-	VERIFY PANEL SHEATHING BOUNDARY AND FIELD FASTENERS AND ATTACHMENT AT ALL EDGES OF SHEAR WALL	
- HOLD-DOWN	P	-	VERIFY TYPE, SIZE, LOCATION AND ATTACHMENT	
<b>SCREWED ATTACHMENTS</b>				
- FASTENER	P	-	VERIFY TYPE, DIAMETER, LENGTH, SPACING AND EDGE DISTANCES	
- SCREW PENETRATION	P	-	VERIFY MATERIALS HAVE BEEN DRAWN TOGETHER AND SCREWS ARE FULLY DRIVEN WITH A MINIMUM PENETRATION OF 3 THREADS THROUGH THE LAST MATERIAL JOINED	
- DAMAGED SCREWS	P	-	NO POPPED SCREW HEADS OR STRIPPED SCREWS ARE PERMITTED. ALL DAMAGED SCREWS SHALL BE REPLACED	
- COLD FORMED STEEL ASSEMBLIES	P	ICC-ES REPORT	VERIFY TYPE, NUMBER OF FASTENERS, AND INSTALLATION IN CONFORMANCE WITH ICC-ES REPORT	
<b>POWER-ACTUATED FASTENERS</b>				
- PRIOR TO INSTALLATION	FIRST OF EACH FASTENER TYPE AND BASE MATERIAL	ICC-ES REPORT	VERIFY TYPE, DIAMETER, LENGTH, FINISH, AND BASE MATERIAL	
- DURING INSTALLATION	P	ICC-ES REPORT	-	
- AFTER INSTALLATION	100% VISUAL	-	VERIFY MATERIALS HAVE BEEN DRAWN TOGETHER AND FASTENER HEAD STAND-OFF IS ACCEPTABLE (FULLY DRIVEN).	

SOILS SPECIAL INSPECTIONS				
ITEM	FREQUENCY	STANDARD	CRITERIA	
<b>SUBGRADE</b>				
- EXCAVATION	P	-	VERIFY EXCAVATIONS ARE EXTENDED TO THE PROPER DEPTH AND HAVE REACHED THE PROPER BEARING MATERIAL	
- BEARING MATERIAL	P	SOILS REPORT	VERIFY BEARING MATERIAL IS ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	
<b>CONTROLLED FILL</b>				
- PRIOR TO PLACEMENT	P	-	VERIFY SUBGRADE HAS BEEN PROPERLY PREPARED	
- PLACEMENT	C	-	VERIFY USE OF PROPER MATERIALS, DENSITIES, COMPACTION, AND LIFT...	

**SOILS SPECIAL INSPECTION NOTES:**

- SEE CIVIL DRAWINGS AND/OR SPECIFICATIONS FOR ADDITIONAL EARTHWORK AND UTILITY INSPECTION REQUIREMENTS.
- SEE CIVIL DRAWINGS AND/OR SPECIFICATIONS FOR CLASSIFICATION AND TESTING REQUIREMENTS FOR COMPACTED FILL AND/OR CONTROLLED LOW-STRENGTH MATERIAL.

STRUCTURAL CONCRETE TESTING				
ITEM	FREQUENCY	STANDARD	CRITERIA	
<b>CONCRETE</b>				
- COMPOSITE SAMPLE			OBTAIN AT POINT OF PLACEMENT. FOR DRILLED PIERS OBTAIN NEAR BEGINNING OF LOAD PRIOR TO PLACEMENT IN SHAFT. ADJUST FREQUENCY AS REQUIRED TO PROVIDE MINIMUM 5 TOTAL TESTS PER MIX BUT NOT MORE THAN ONE SAMPLE PER TRUCK LOAD	
1. f <sub>c</sub> < 5000 PSI	100 CY/MIX/DAY	ASTM C172		
- SLUMP/SLUMP FLOW	EACH COMPOSITE SAMPLE	ASTM C143 (SLUMP) OR ASTM C1611 (SLUMP FLOW)	SPECIFIED SLUMP SHALL BE AS SUBMITTED IN THE MIX DESIGN ± 1 1/2". PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE	
- TEMPERATURE	EACH COMPOSITE SAMPLE AND 60 MINUTE...	ASTM C1064	REQUIRED WHEN AIR TEMPERATURE IS 40 °F AND BELOW OR 80°F AND ABOVE	
- COLD WEATHER CURING	-	ASTM C1074	RECORD MAXIMUM AND MINIMUM CONCRETE TEMPERATURE DURING CURING PERIOD, WHEN DAILY AVERAGE AIR TEMPERATURE OF 40 °F OR BELOW IS EXPECTED FOR 3 SUCCESSIVE DAYS DURING CURING PERIOD	
- COMPRESSIVE STRENGTH	EACH COMPOSITE SAMPLE	ASTM C31 ASTM C39 EITHER: (4)6x12 OR (6)4x8 CYLINDERS	TEST PER SCHEDULE BELOW: - 7 DAYS: (1)6x12 OR (1)4x8 - 28 DAYS: (2)6x12 OR (3)4x8 - 56 DAYS: (1)6x12 OR (2)4x8 (IF 28 DAY TESTS DO NOT ACHIEVE SPECIFIED 28 DAY STRENGTH) ACCEPTANCE CRITERIA PER ACI 318	

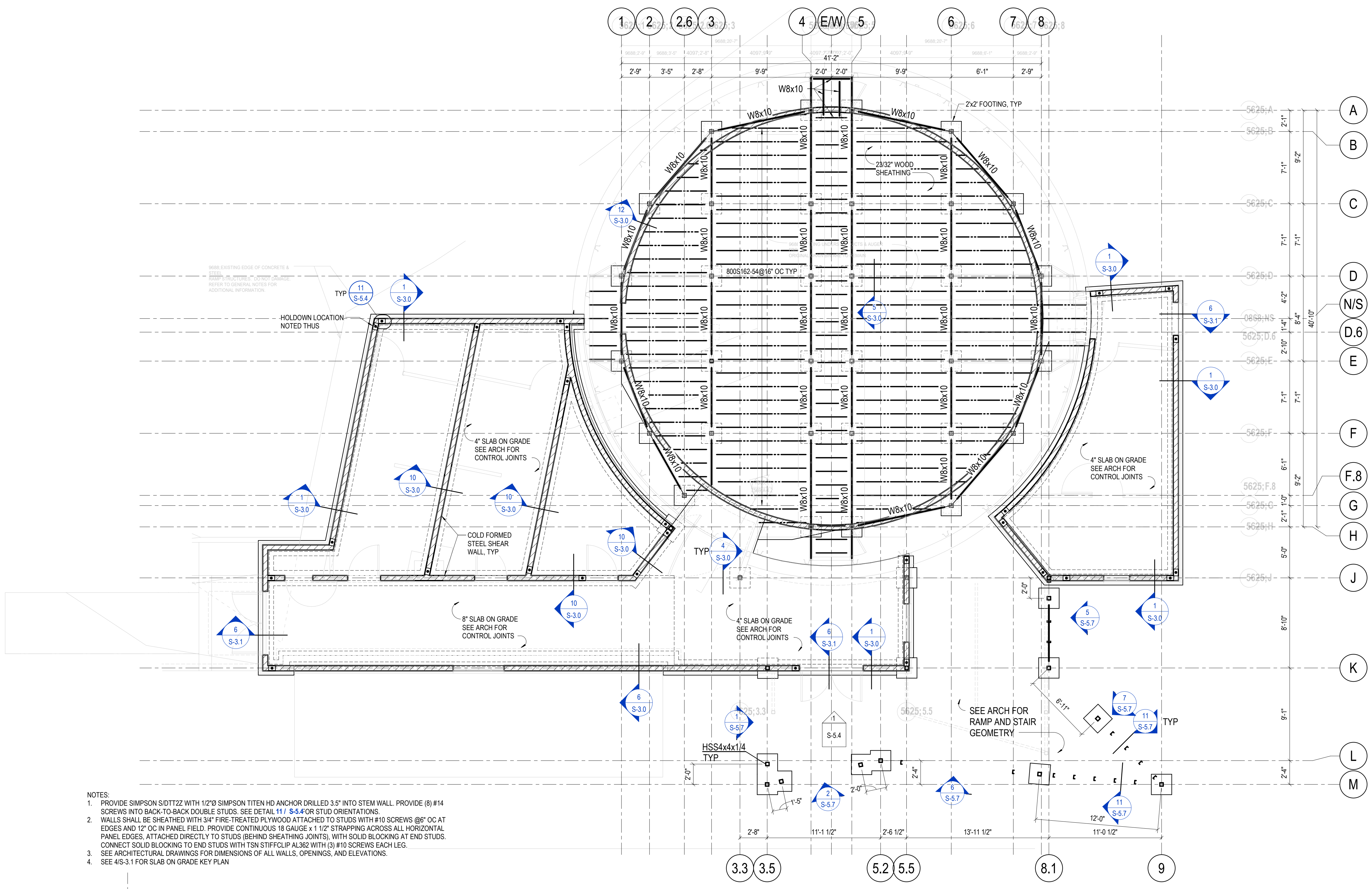
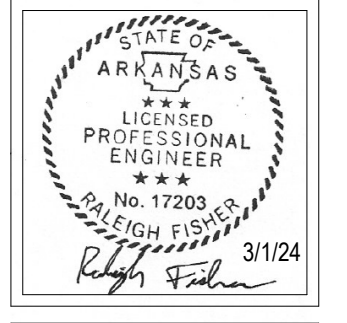
**STRUCTURAL CONCRETE TESTING NOTES:**

- NONDESTRUCTIVE TESTING MAY BE PERMITTED BY THE ARCHITECT, BUT WILL NOT BE USED AS SOLE BASIS FOR APPROVAL OR REJECTION OF DEFICIENT CONCRETE.
- REPORTS OF COMPRESSIVE STRENGTH TESTS SHALL CONTAIN THE FOLLOWING INFORMATION: DATE OF CONCRETE PLACEMENT, LOCATION OF CONCRETE BATCH IN WORK, DESIGN 28-DAY COMPRESSIVE STRENGTH, CONCRETE SUPPLIER AND MIXTURE ID NUMBER, TIME OF BATCH AND PLACEMENT, AMBIENT AIR TEMPERATURE, SITE ADDED WATER AND ADMIXTURES, UNIT WEIGHT, AND AS REQUIRED BY ASTM C39.

STRUCTURAL CONCRETE SPECIAL INSPECTIONS				
ITEM	FREQUENCY	STANDARD	CRITERIA	
<b>REINFORCING STEEL</b>				
- DURING PLACEMENT	P		VERIFY GRADE, FINISH, SIZE, BAR QUANTITY, LOCATION, SPACING, COVER, HOOK LENGTHS, SPLICE LENGTH, SPLICE LOCATIONS, BEND DIAMETERS, COATING, SURFACE CONDITION, AND SUPPORT	
- PRIOR TO PLACEMENT OF CONCRETE	100%	ACI 318 3.5, 7.1-7.7		
- FIELD BENDING	P	ACI 301 3.3.2.8	-	
- MECHANICAL CONNECTORS	C	ICC-ES REPORT	-	
<b>BOLTS AND EMBEDMENTS</b>				
- PRIOR TO PLACEMENT OF CONCRETE	100%	-	VERIFY TYPE, FINISH, DIAMETER, LENGTH, QUANTITY, EMBEDMENT LENGTH, SPACING AND EDGE DISTANCES. VERIFY USE OF PLACING TEMPLATE WHERE SPECIFIED	
<b>CONCRETE</b>				
- MIX DESIGN	EACH TRUCK	-	VERIFY USE OF APPROVED DESIGN MIXTURE FOR EACH TRUCK LOAD	
- FORMWORK PRIOR TO PLACEMENT OF CONCRETE	P	ACI 318 6.1.1	INSPECT FIRST POUR OF EACH TYPE (GRADE BEAM, COLUMN, STRUCTURAL SLAB, SLAB-ON-DECK, ETC.)	
- PLACEMENT OF CONCRETE	C	ACI 318 5.9-5.10	-	
- CURING	P	ACI 318 5.11-5.13	-	

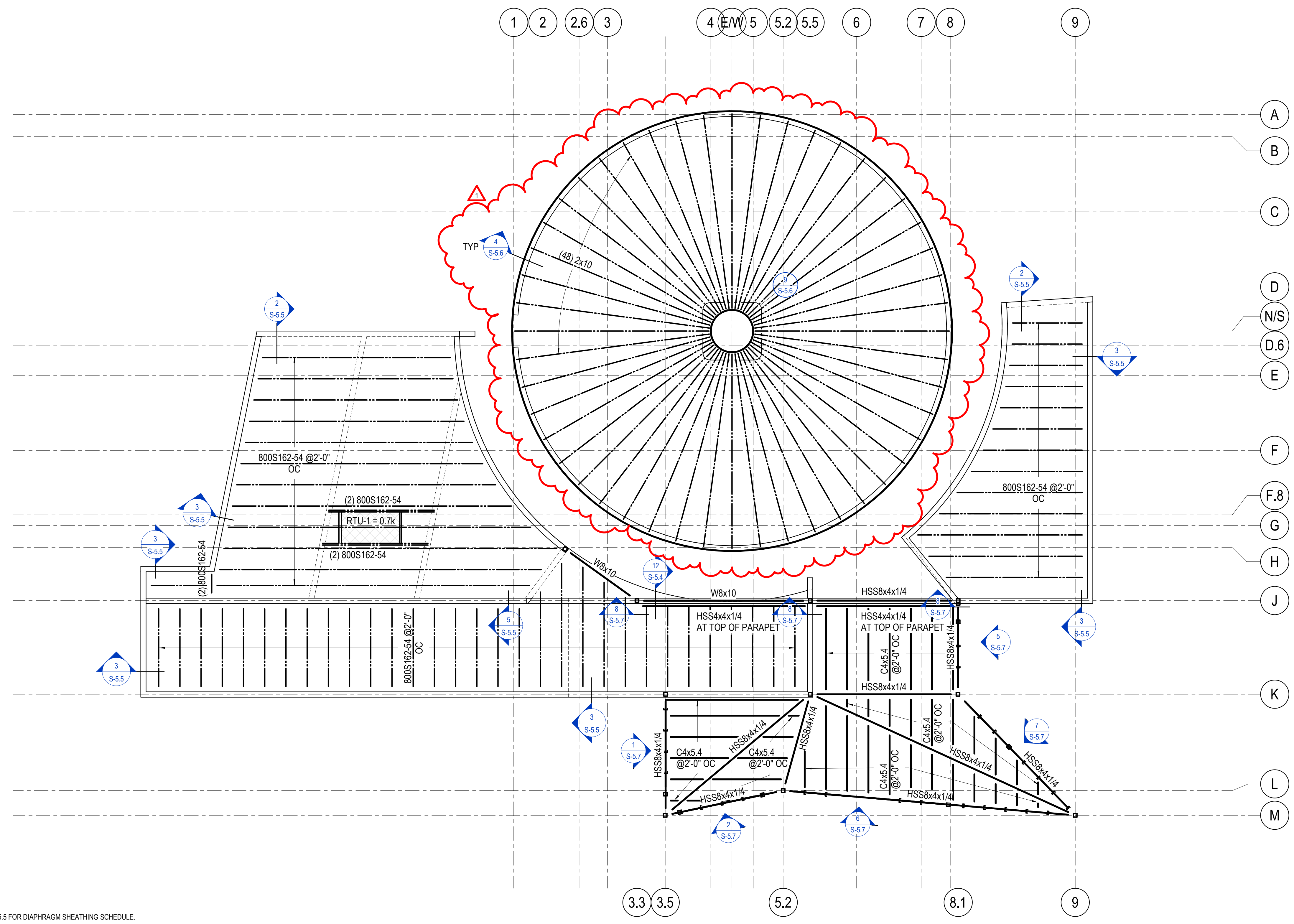
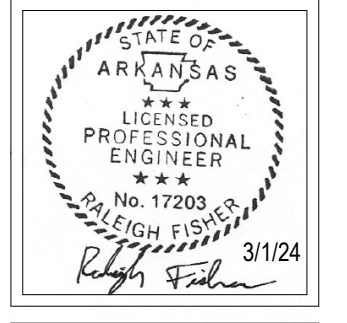
STRUCTURAL STEEL INSPECTIONS				
ITEM	INSPECTION TASK	STANDARD	CRITERIA/REMARKS	
- PRIOR TO FABRICATION OR ERECTION	PERFORM	AISC 360, CHAPTER N	REVIEW MATERIAL TEST REPORTS AND CERTIFICATIONS FOR STRUCTURAL STEEL, FASTENERS, ANCHOR RODS, HEADED STUD ANCHORS	
<b>PRIOR TO WELDING</b>				
- REVIEW MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AND WELDING PROCEDURE SPECIFICATIONS	PERFORM	AISC 360, CHAPTER N	-	
- FIT UP OF WELDS, INCLUDING JOINT GEOMETRY, AND CONFIGURATIONS AND FINISH OF ACCESS HOLES	OBSERVE	AISC 360, CHAPTER N	-	
- MATERIAL IDENTIFICATION	OBSERVE	AISC 360, CHAPTER N	-	
- WELDER IDENTIFICATION SYSTEM	OBSERVE	AISC 360, CHAPTER N	-	
<b>DURING WELDING</b>				
- USE OF QUALIFIED WELDERS	OBSERVE	AISC 360, CHAPTER N	-	
- CONTROL AND HANDLING OF WELDING CONSUMABLES	OBSERVE	AISC 360, CHAPTER N	-	
- NO WELDING OVER CRACKED TACK WELDS	OBSERVE	AISC 360, CHAPTER N	-	
- ENVIRONMENTAL CONDITIONS, AND WPS FOLLOWED	OBSERVE	AISC 360, CHAPTER N	-	
- WELDING TECHNIQUES - SINGLE PASS WELDS	OBSERVE	AISC 360, CHAPTER N	-	
- WELDING TECHNIQUES - MULTI-PASS WELDS	OBSERVE	AISC 360, CHAPTER N	-	
<b>AFTER WELDING</b>				
- WELDS CLEANED	OBSERVE	AISC 360, CHAPTER N	-	
- SIZE, LENGTH, AND LOCATION OF WELDS	PERFORM	AISC 360, CHAPTER N	-	
- WELDS MEET VISUAL ACCEPTANCE CRITERIA	PERFORM	AISC 360, CHAPTER N, AWS D1.1	WHERE INSPECTOR OBSERVES QUESTIONABLE WELDS, NON-DESTRUCTIVE TESTING SHALL BE PERFORMED	
- ARC STRIKES	PERFORM	AISC 360, CHAPTER N	-	
- K-AREA	PERFORM	AISC 360, CHAPTER N	-	
- REPAIR ACTIVITIES	PERFORM	AISC 360, CHAPTER N	-	
- PLACEMENT AND INSTALLATION OF HEADED STUD ANCHORS	PERFORM	AISC 360, CHAPTER N	-	
- DOCUMENT ACCEPTANCE OR REJECTION OF WELDED MEMBER OR JOINT	PERFORM	AISC 360, CHAPTER N	-	
<b>PRIOR TO BOLTING</b>				
- REVIEW MANUFACTURER CERTIFICATIONS FOR FASTENER MATERIALS	PERFORM	AISC 360, CHAPTER N	-	
- FASTENERS MARKS IN ACCORDANCE WITH ASTM REQUIREMENTS	OBSERVE	AISC 360, CHAPTER N	-	
- PROPER FASTENERS AND BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	OBSERVE	AISC 360, CHAPTER N	-	
- CONNECTING ELEMENTS MEET REQUIREMENTS, INCLUDING HOLE REPAIR AND FAYING SURFACE	OBSERVE	AISC 360, CHAPTER N	-	
- PRE-INSTALLATION VERIFICATION TESTING	OBSERVE	AISC 360, CHAPTER N	NOT APPLICABLE FOR SNUG TIGHT JOINTS	
- PROPER STORAGE FOR FASTENER COMPONENTS	OBSERVE	AISC 360, CHAPTER N	-	
<b>DURING BOLTING</b>				
- FASTENERS PLACED IN ALL HOLES AND POSITIONED AS REQUIRED	OBSERVE	AISC 360, CHAPTER N	-	
<b>AFTER BOLTING</b>				
- DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	PERFORM	DOCUMENT ACCEPTANCE OR REJECTION MEMBER OR JOINT	-	

OBSERVE - OBSERVE THESE ITEMS ON A RANDOM BASIS  
 PERFORM - THESE INSPECTIONS SHALL BE PERFORMED FOR EACH WELDED CONNECTION, EACH BOLTED CONNECTION, AND EACH ITEM, PRIOR TO ACCEPTANCE



- NOTES:
1. PROVIDE SIMPSON S/DIT22 WITH 1/2" SIMPSON TITEN HD ANCHOR DRILLED 3.5" INTO STEM WALL. PROVIDE (8) #14 SCREWS INTO BACK-TO-BACK DOUBLE STUDS. SEE DETAIL 11/ S-4 FOR STUD ORIENTATIONS.
  2. WALLS SHALL BE SHEATHED WITH 3/4" FIRE-TREATED PLYWOOD ATTACHED TO STUDS WITH #10 SCREWS @ 6" OC AT EDGES AND 12" OC IN PANEL FIELD. PROVIDE CONTINUOUS 18 GAUGE X 1 1/2" STRAPPING ACROSS ALL HORIZONTAL PANEL EDGES, ATTACHED DIRECTLY TO STUDS (BEHIND SHEATHING JOINTS), WITH SOLID BLOCKING AT END STUDS. CONNECT SOLID BLOCKING TO END STUDS WITH TSN STIFFCLIP AL362 WITH (3) #10 SCREWS EACH LEG.
  3. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF ALL WALLS, OPENINGS, AND ELEVATIONS.
  4. SEE 4/S-3.1 FOR SLAB ON GRADE KEY PLAN

**1 FLOOR PLAN**  
 S-2.0  
 NORTH

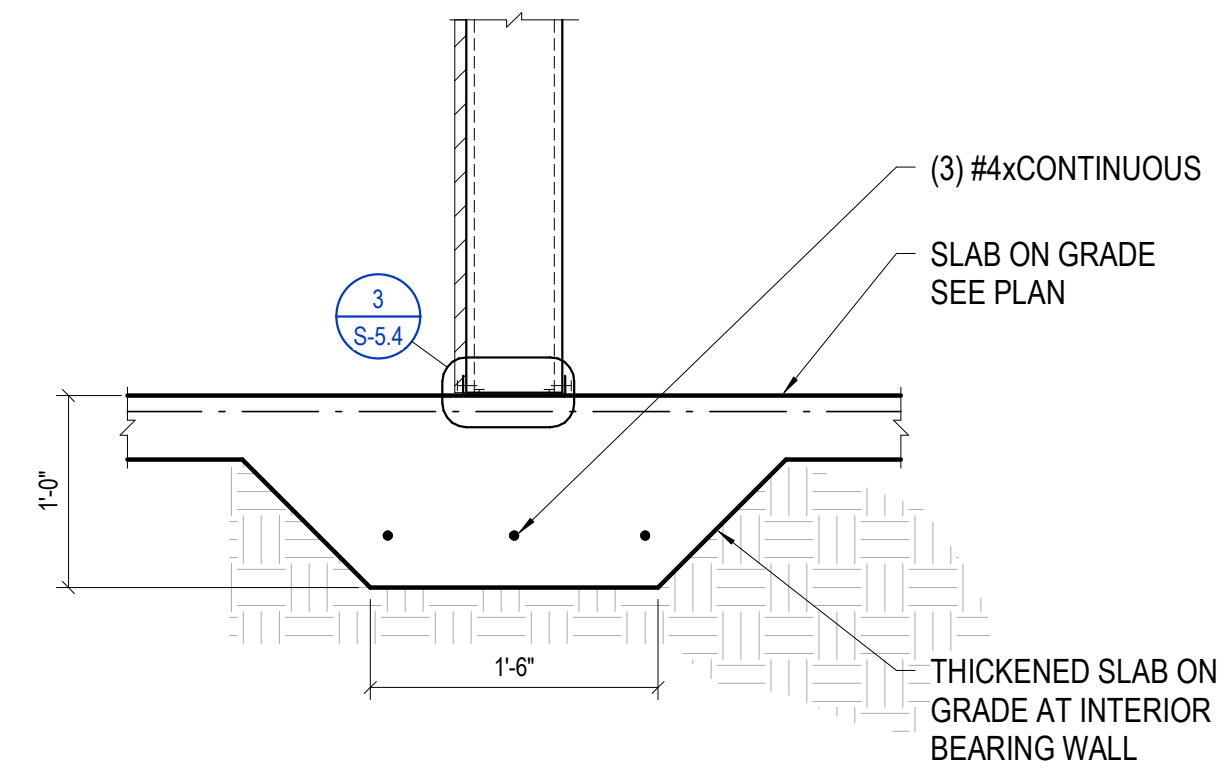


NOTES:  
 1. SEE 9/S-5.5 FOR DIAPHRAGM SHEATHING SCHEDULE.

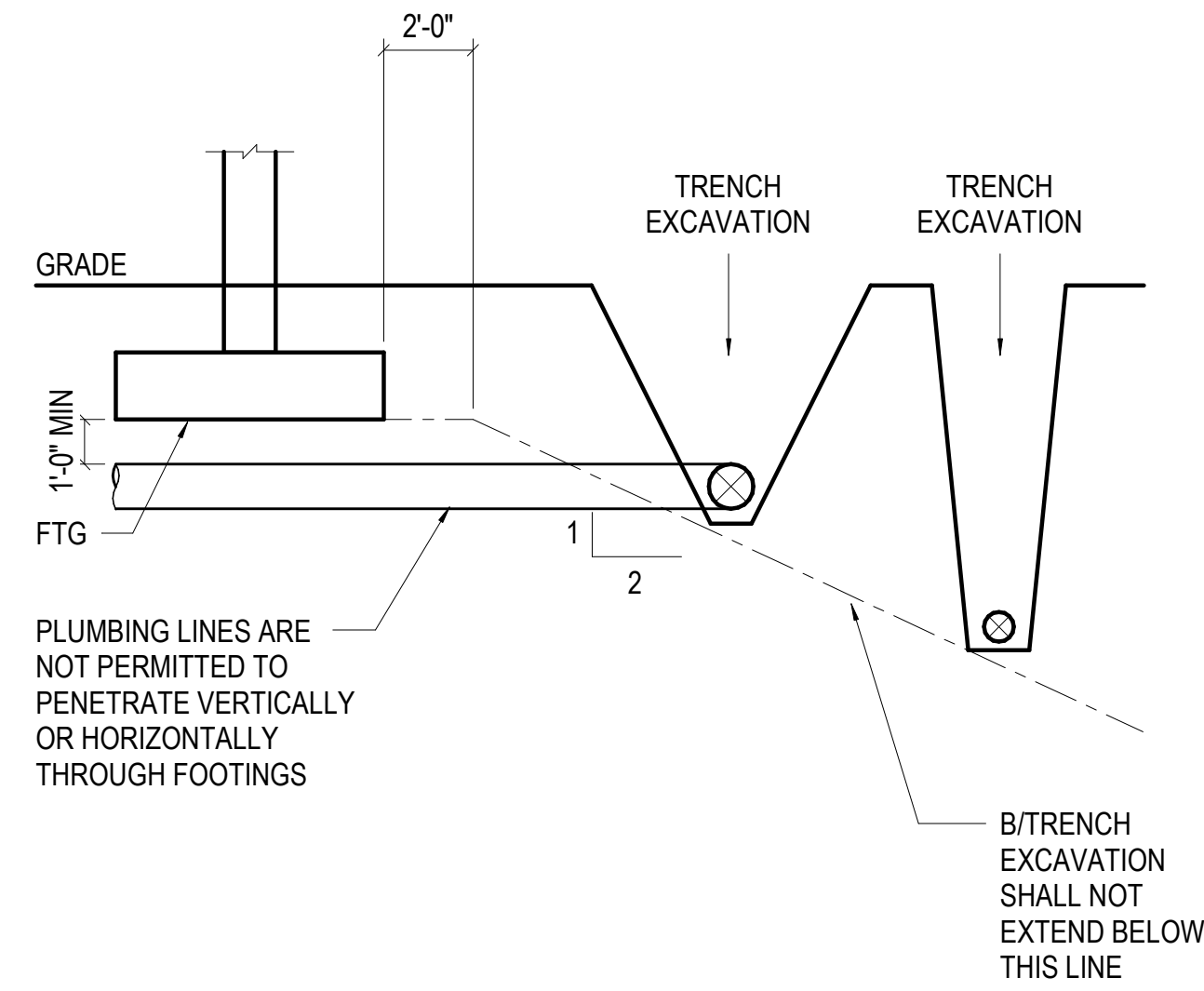
**1 ROOF**  
 S-2.1

NORTH

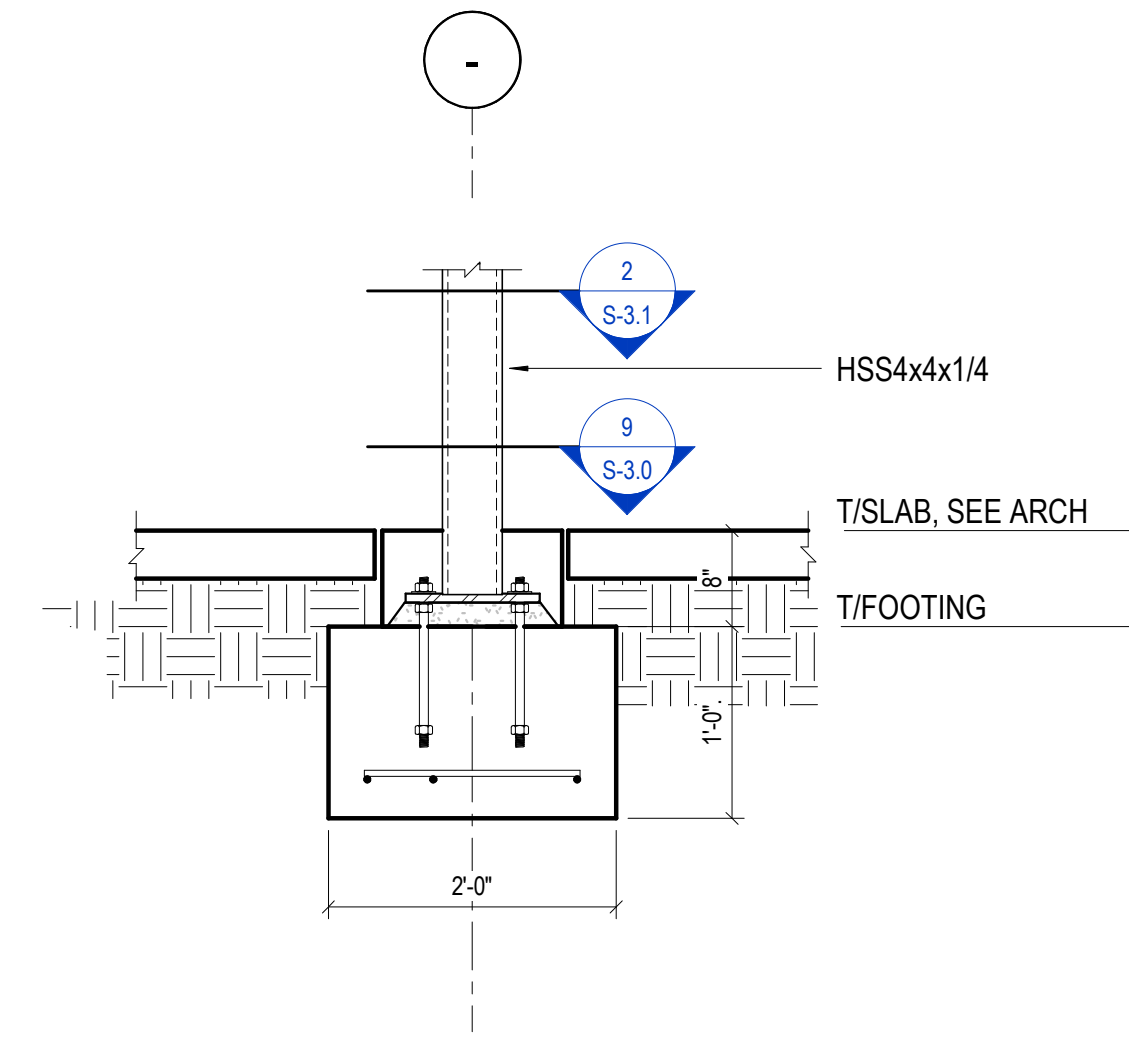




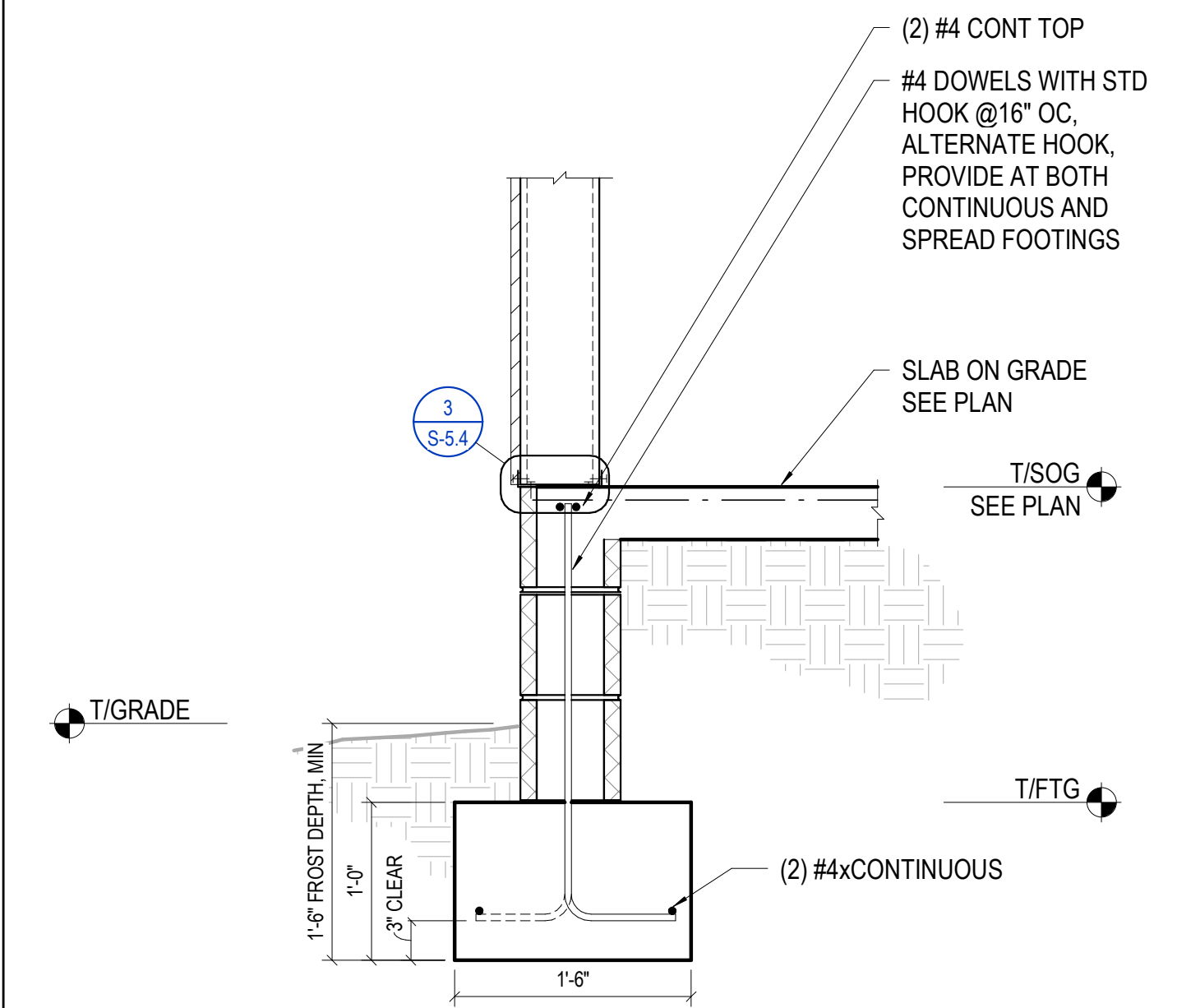
10 THICKENED SLAB ON GRADE AT INTERIOR BEARING WALL  
S-3.0



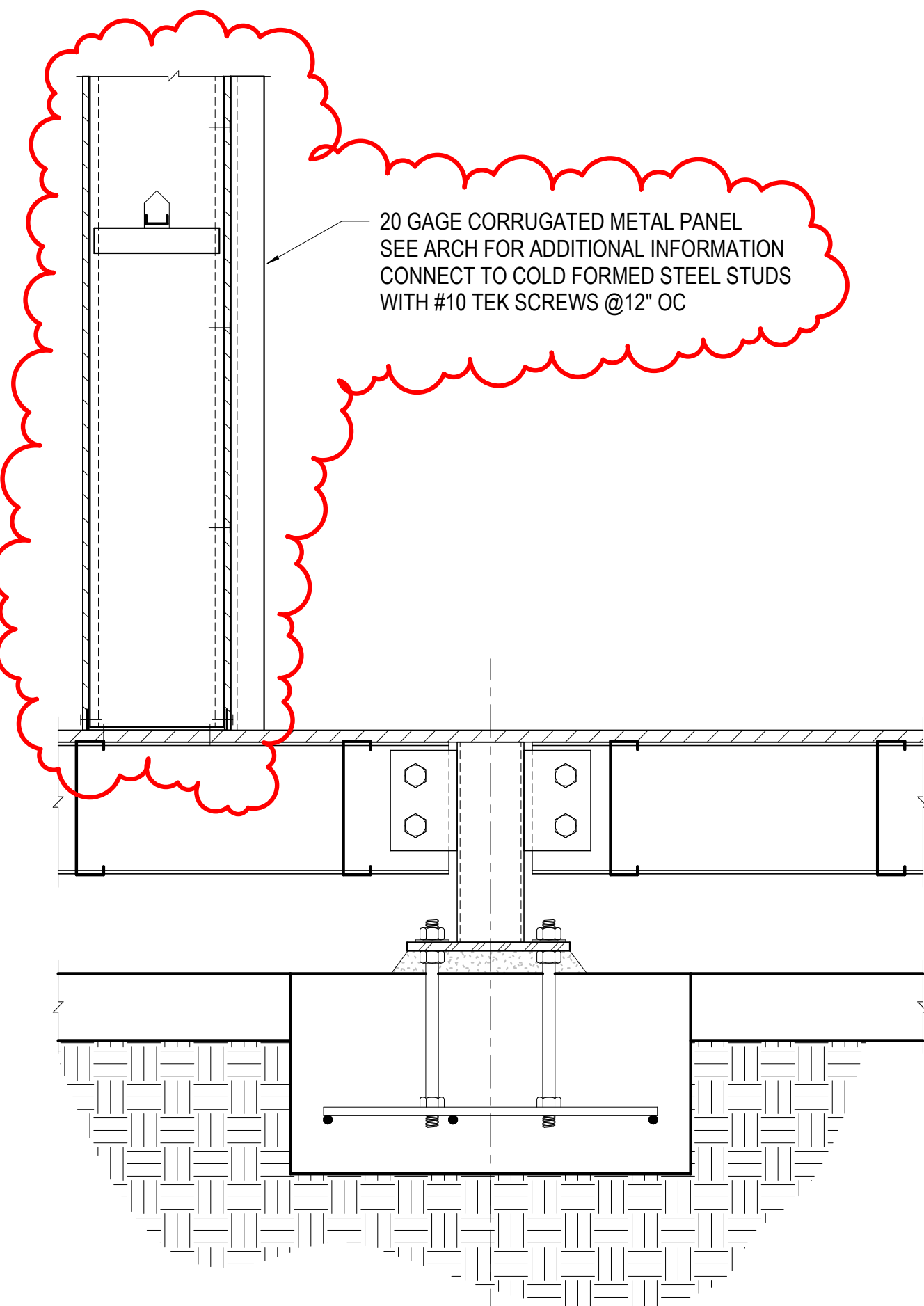
7 TYP EXCAVATION AT FTG  
S-3.0



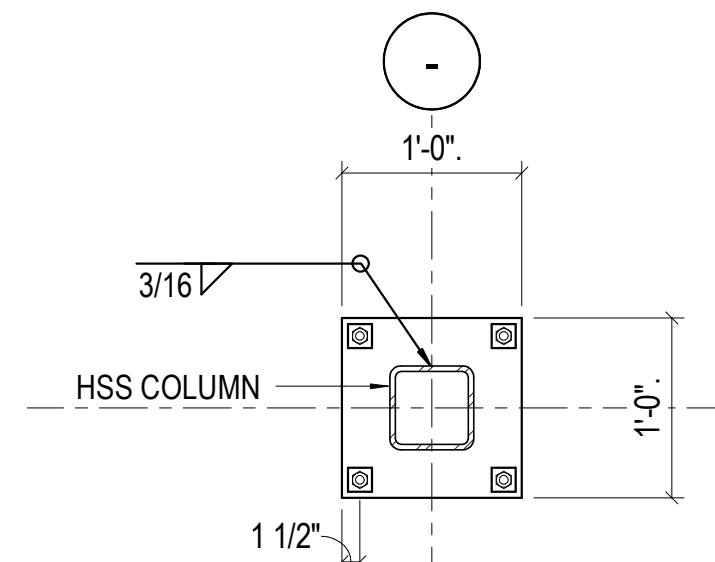
4 INTERIOR COLUMN AT SPREAD FOOTING  
S-3.0



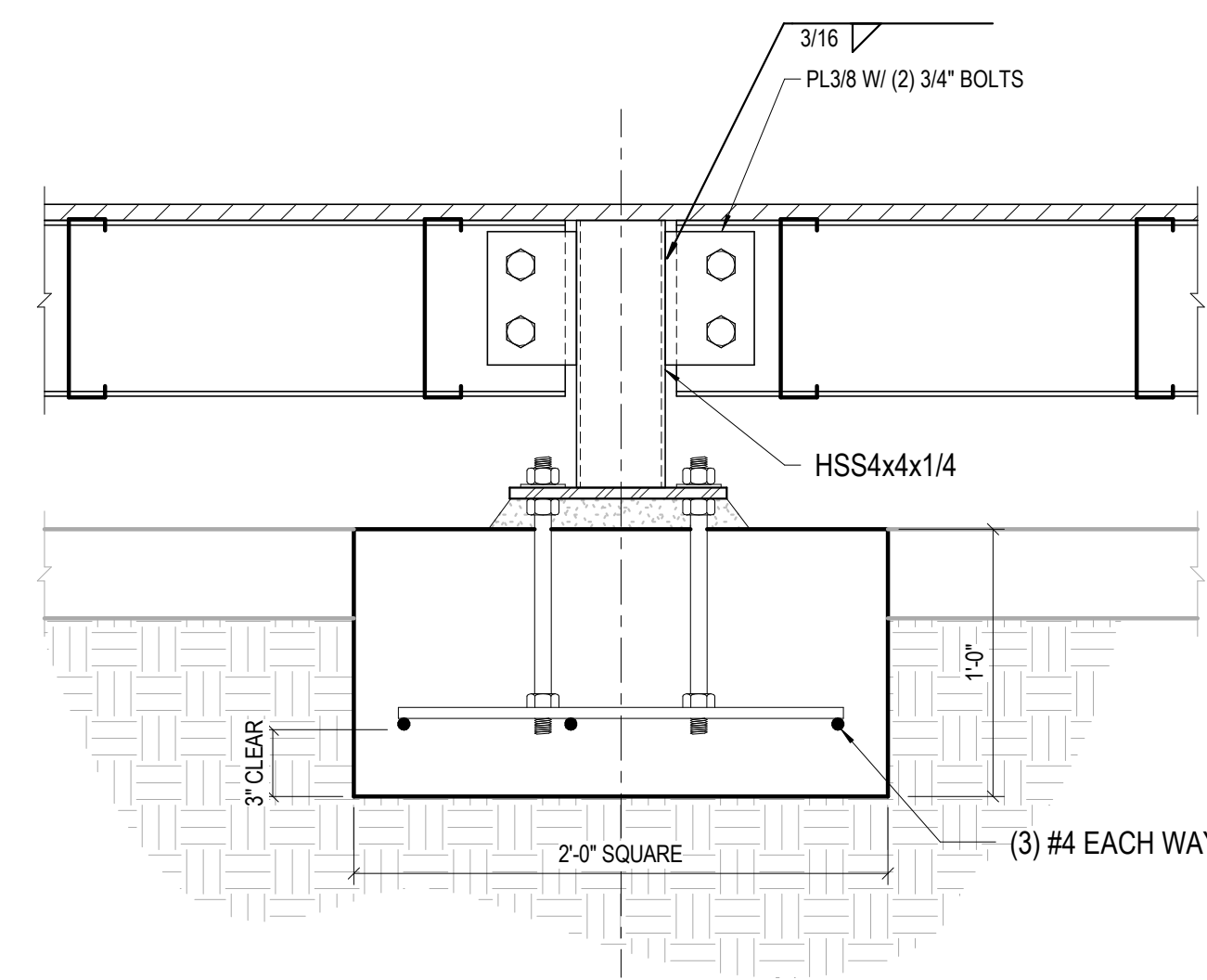
1 TYPICAL STRIP FOOTING  
S-3.0



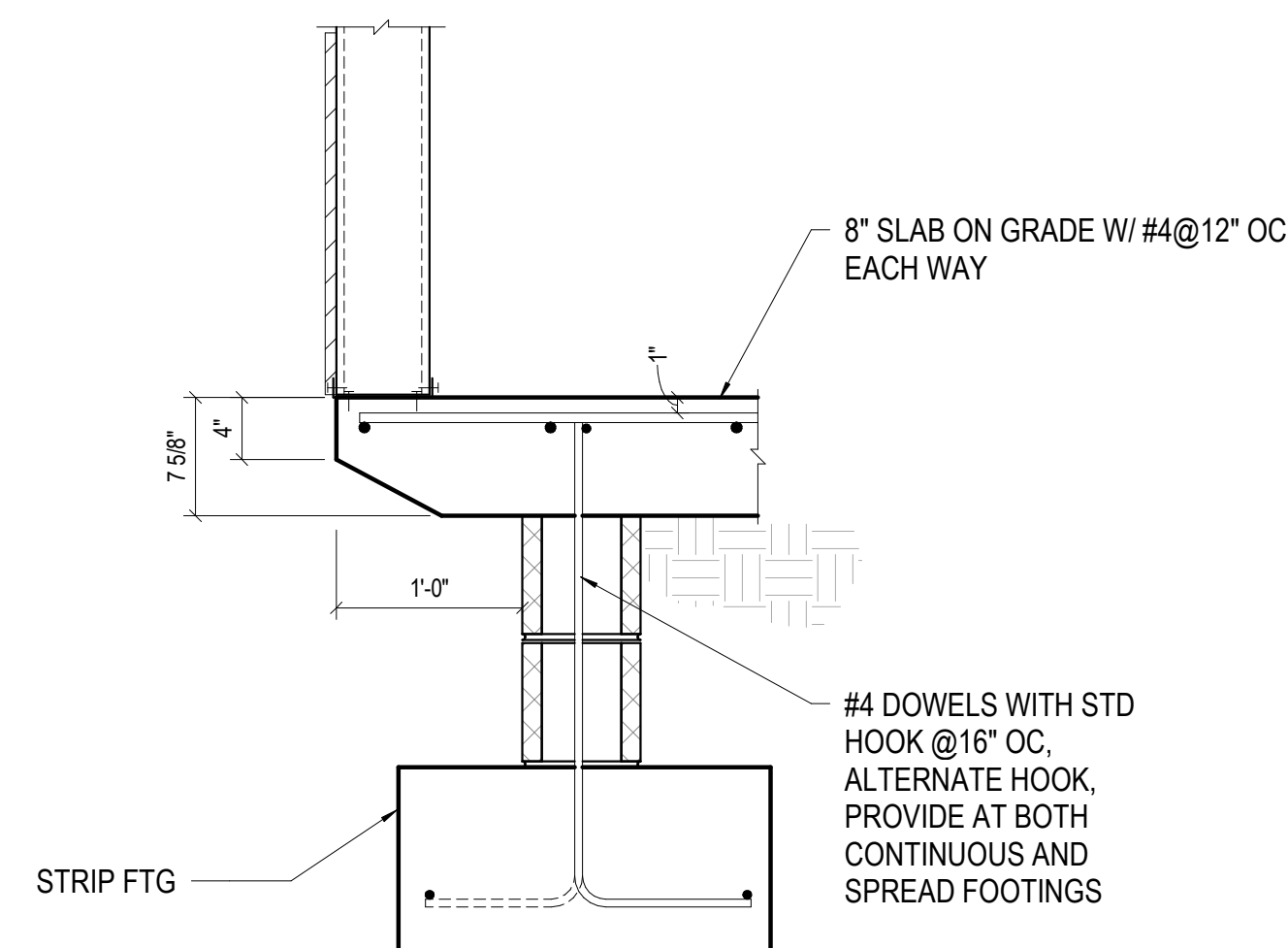
12 CORRUGATED WALL PANEL  
S-3.0



9 TYPICAL GRAVITY COLUMN BASE PLATE  
S-3.0

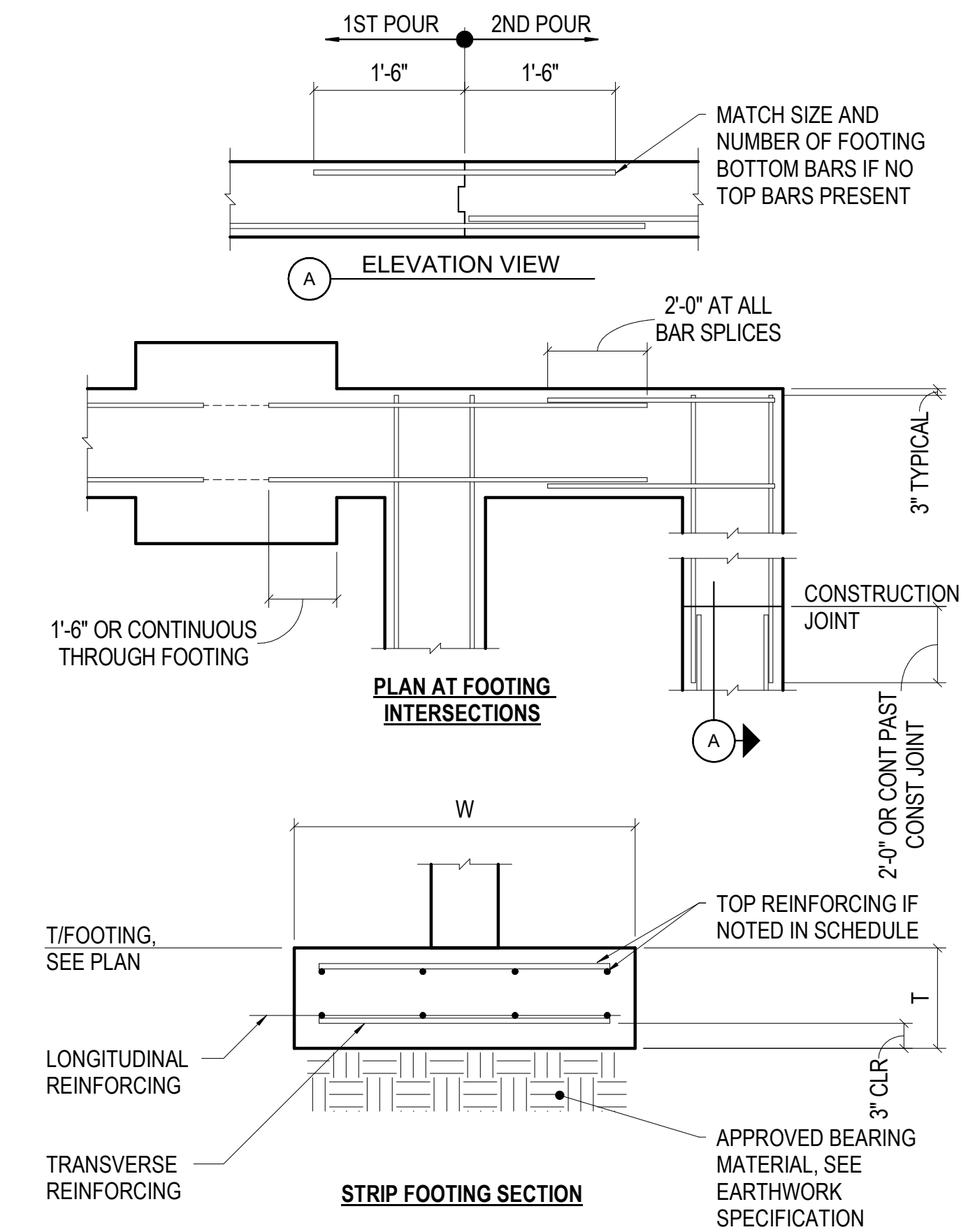


5 FOOTING IN GRAIN BIN  
S-3.0

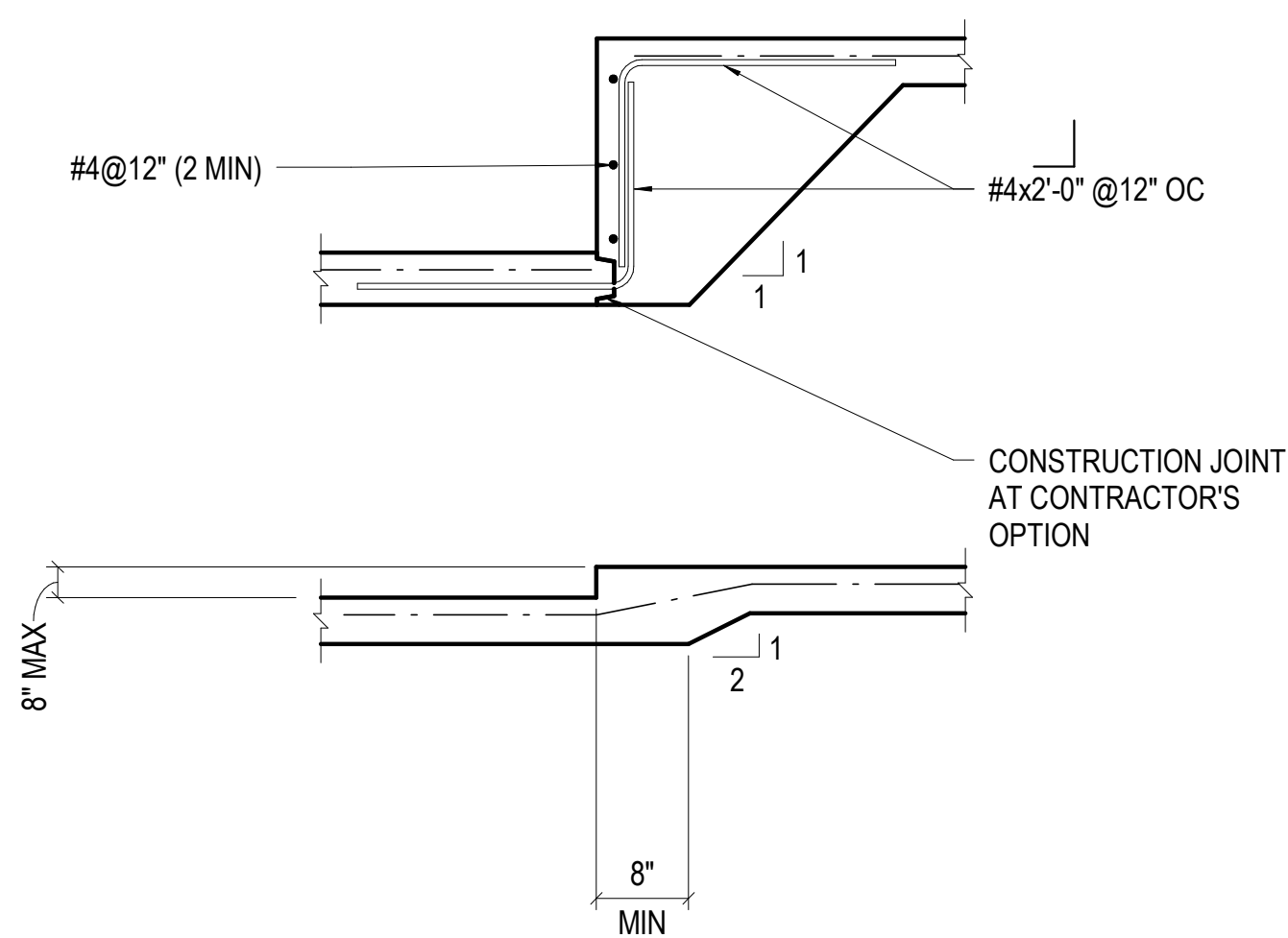


6 SLAB ON GRADE CANTILEVER  
S-3.0

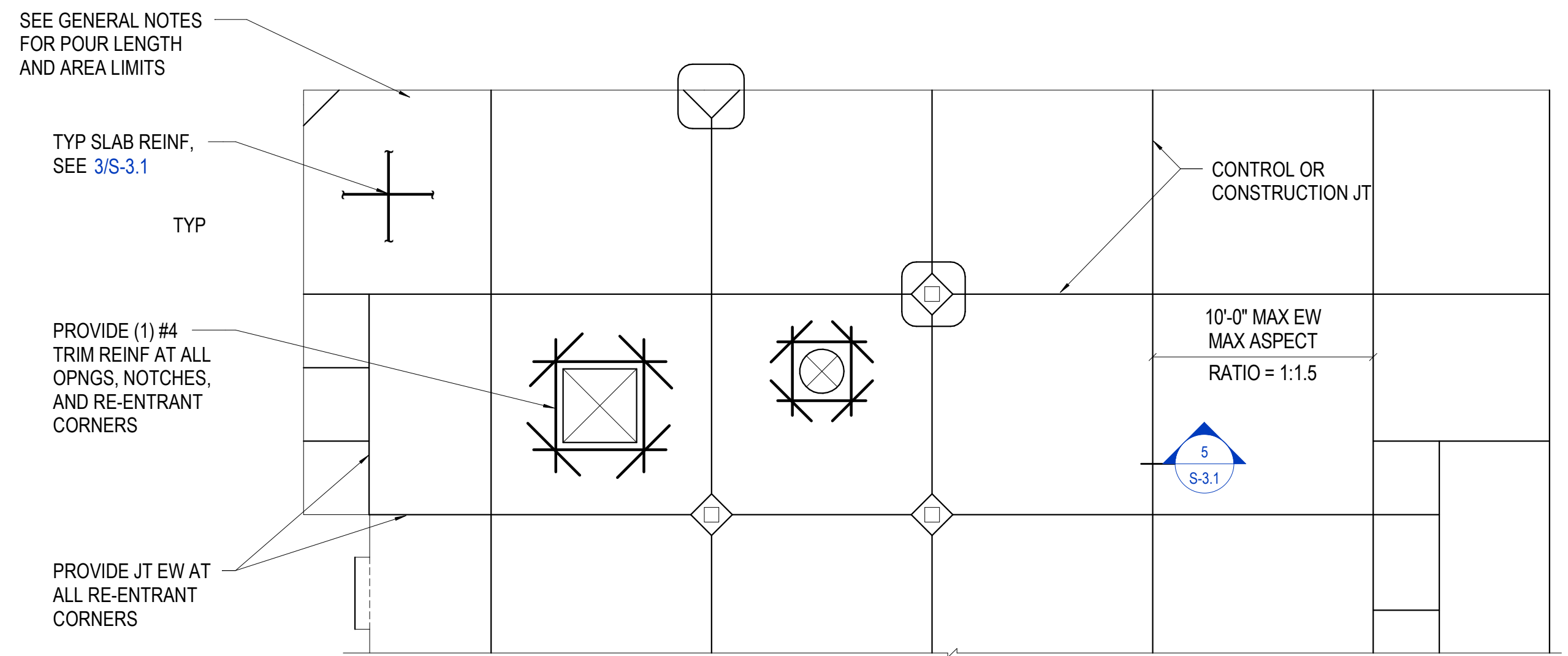
STRIP FOOTING SCHEDULE				
MARK	FOOTING SIZE W x T	LONG REINF	TRANS REINF	REMARKS
SF18	1'-6" x 1'-0"	(2) #4	#4@18" OC	BOT



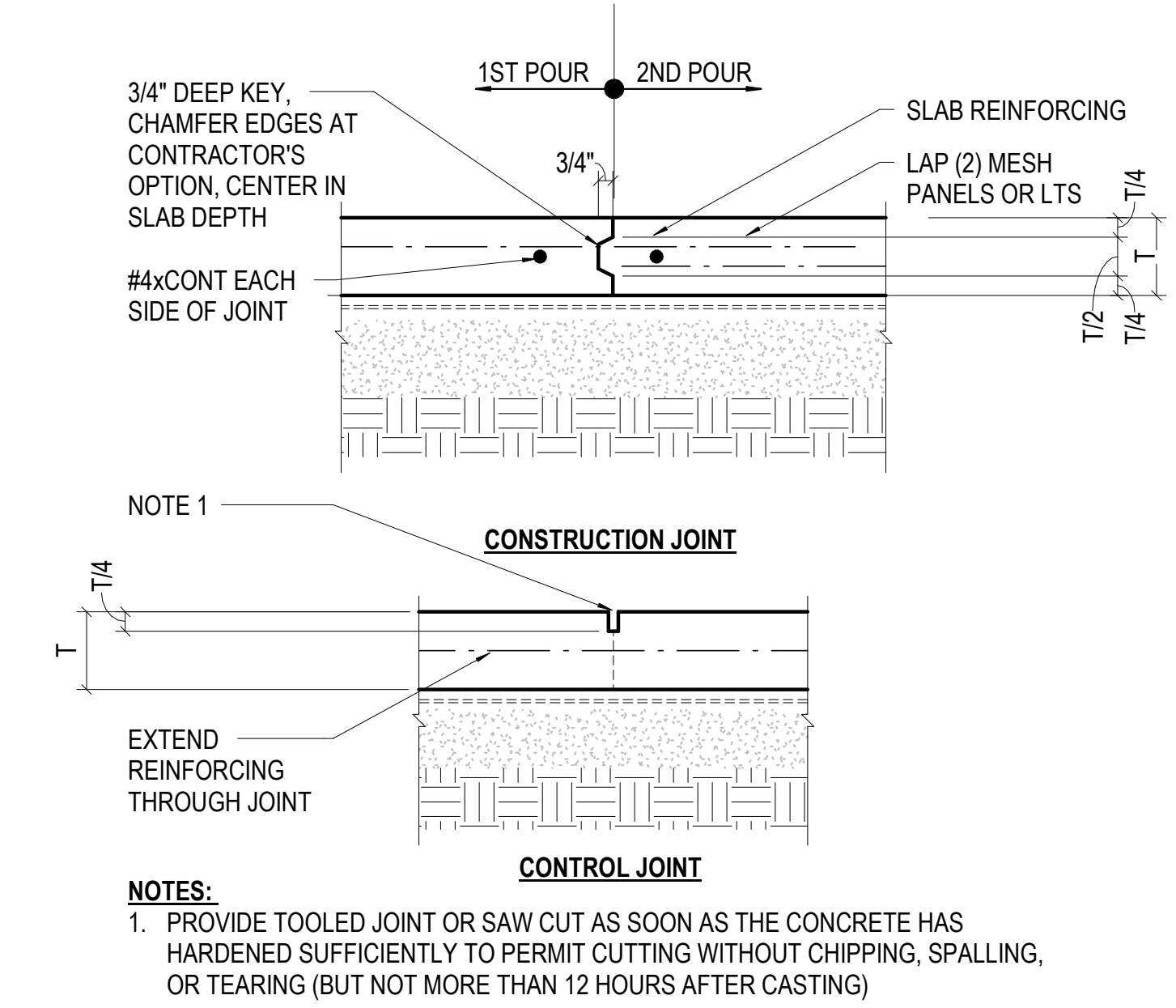
3 TYP STRIP FOOTING  
S-3.0



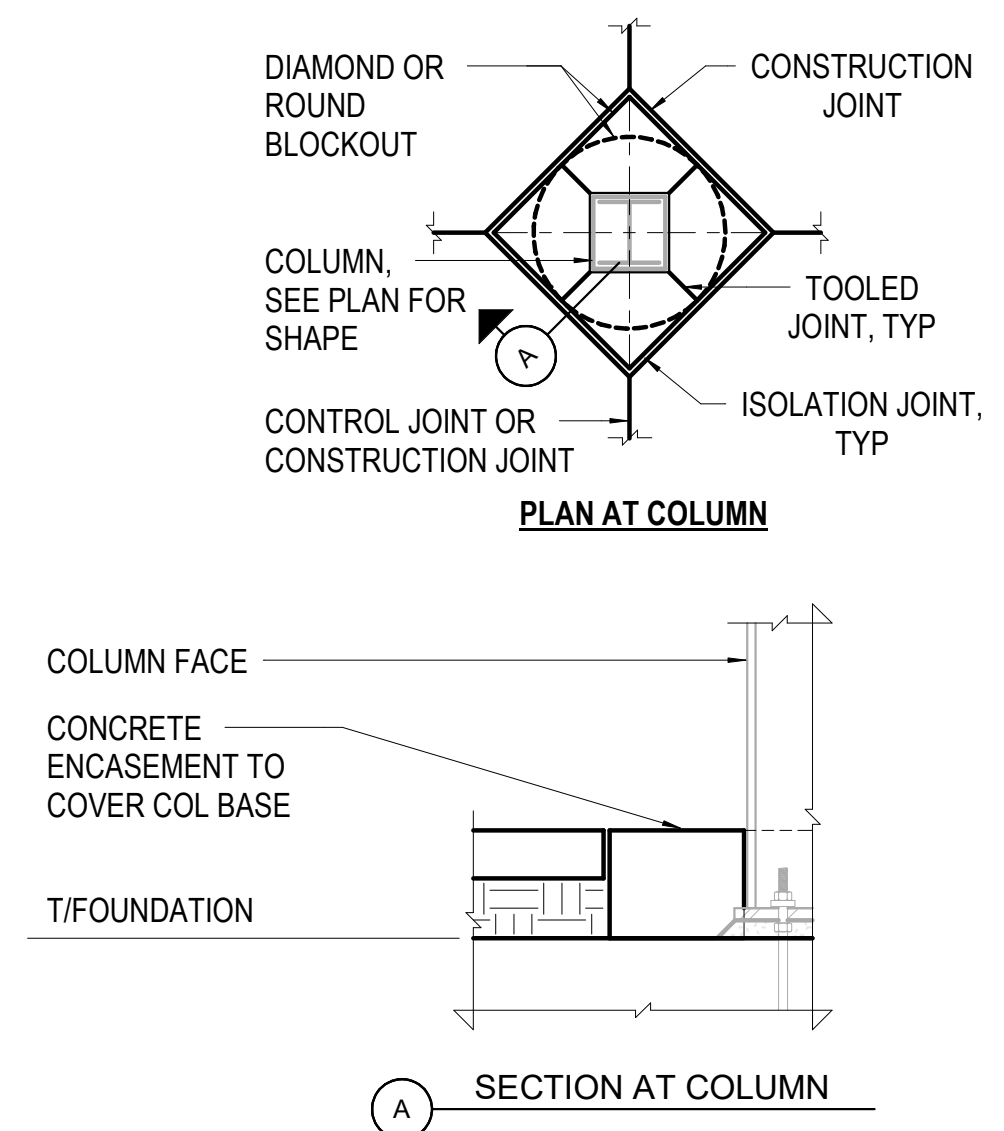
7 TYPICAL SOG STEP  
S-3.1



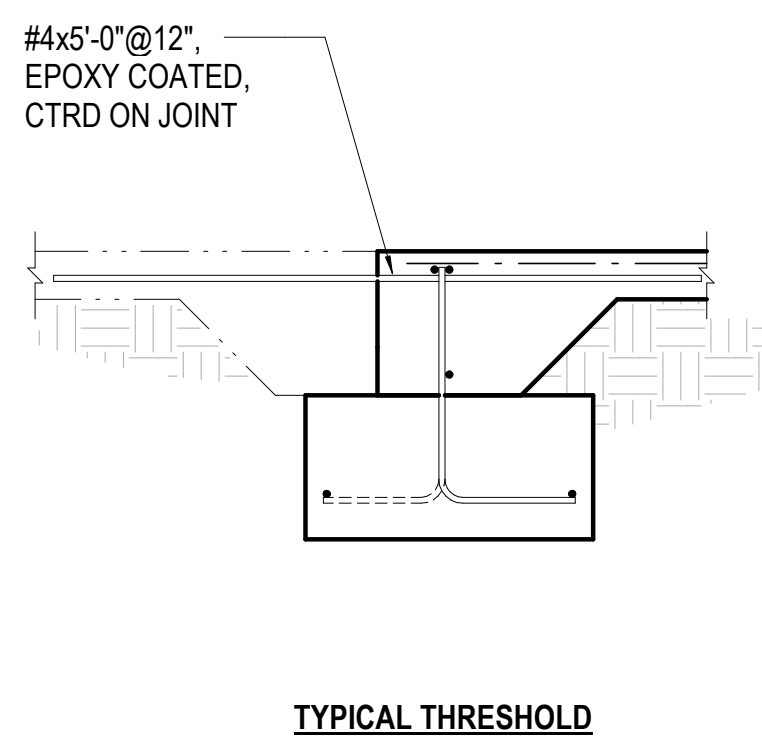
4 TYP SOG KEY PLAN  
S-3.1



5 SLAB ON GRADE JOINTS  
S-3.1

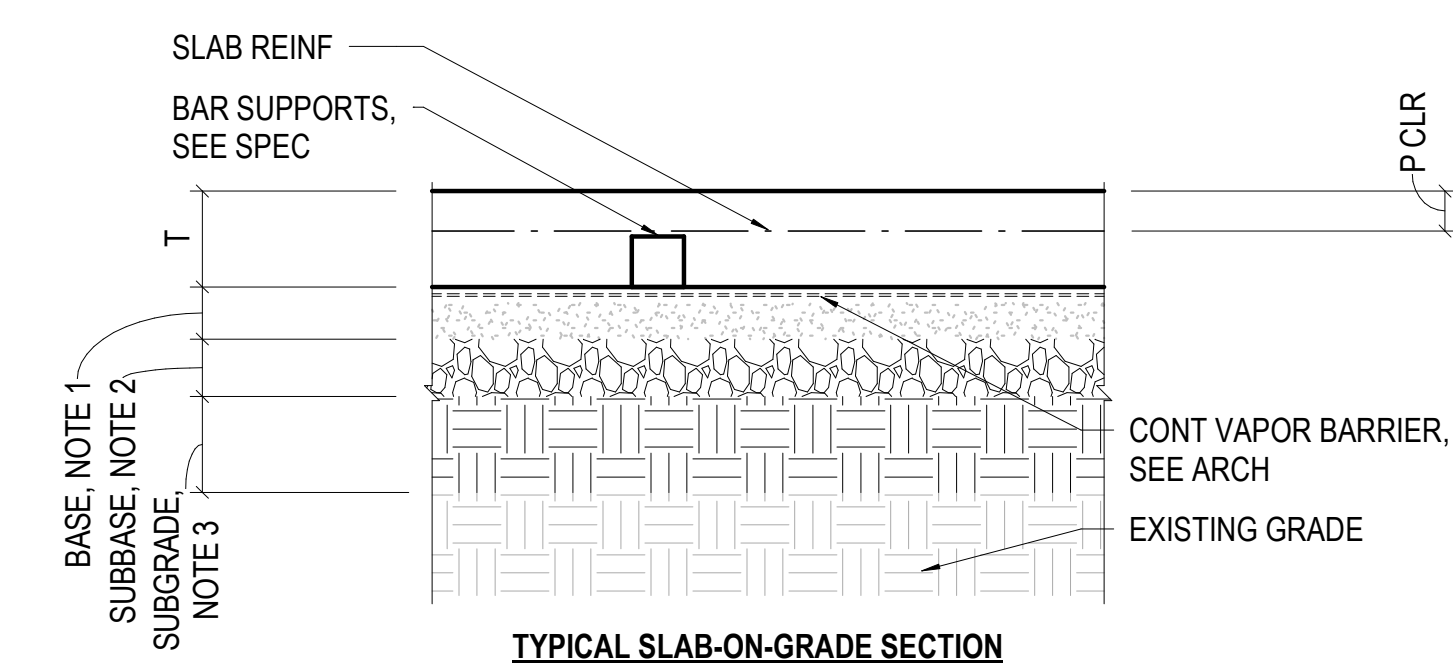


2 SOG BLOCKOUT AT COLUMN  
S-3.1



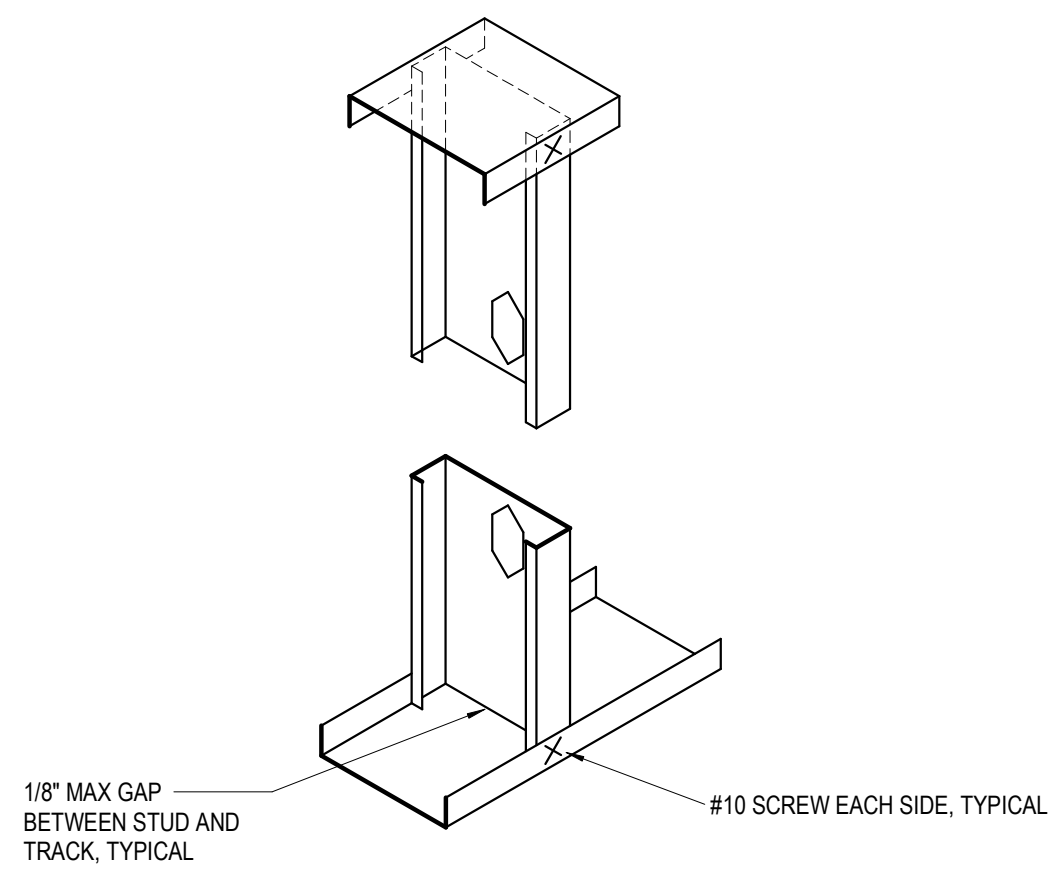
6 TYP THRESHOLD  
S-3.1

SLAB ON GRADE SCHEDULE				
TYPE	THICKNESS T	REINF	BAR POSITION	REMARKS
SOG4	4"	6x6-W1.4xW1.4	1"	-
SOG8	8"	#4@12" EW	1"	-

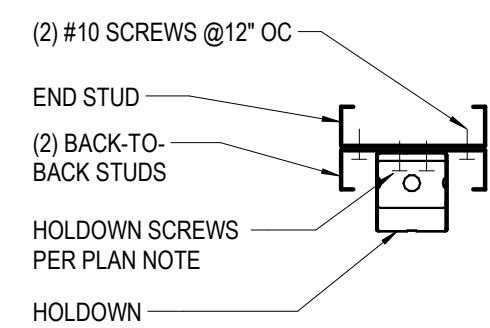


NOTES:  
 1. OPTIONAL COMPACTED GRAVEL OR SAND BASE LAYER 2" TO 4" THICK.  
 2. REQUIRED GRAVEL OR SAND SUBBASE LAYER.  
 3. PROPERLY COMPACTED AND PREPARED SUBGRADE.

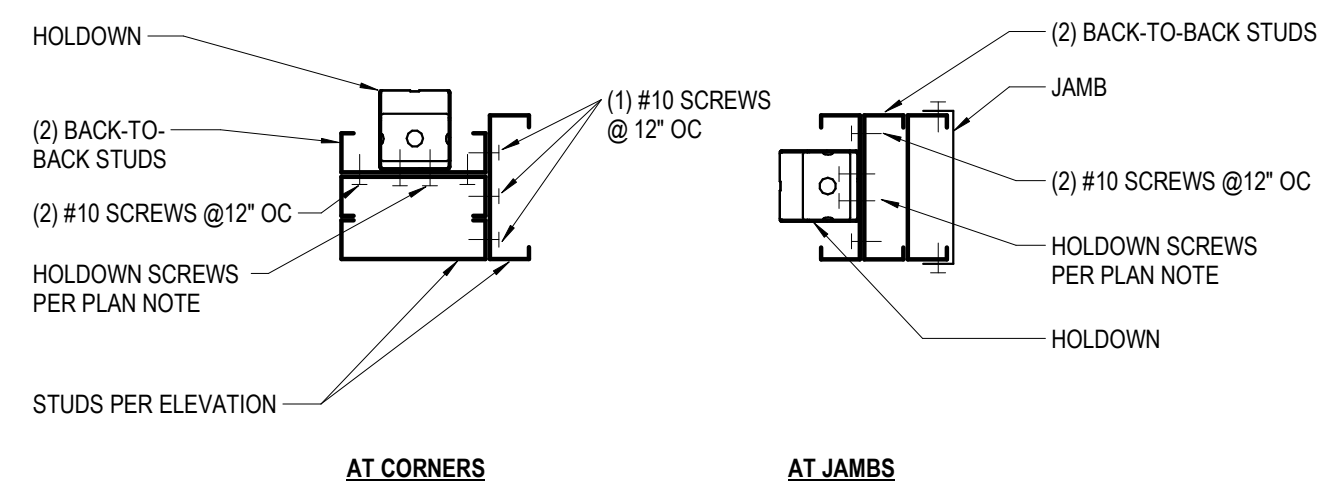
3 TYP SOG REINFORCING  
S-3.1



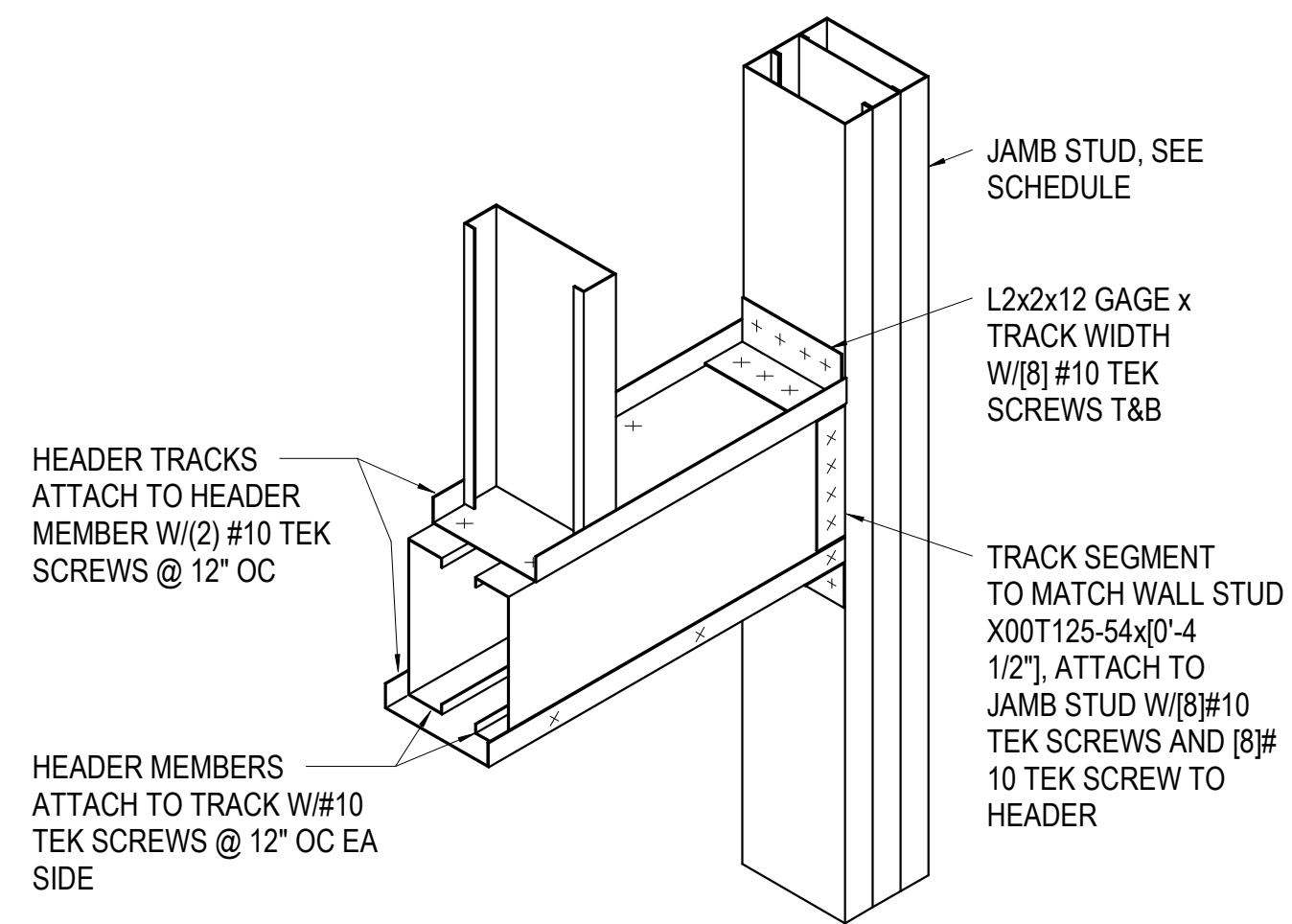
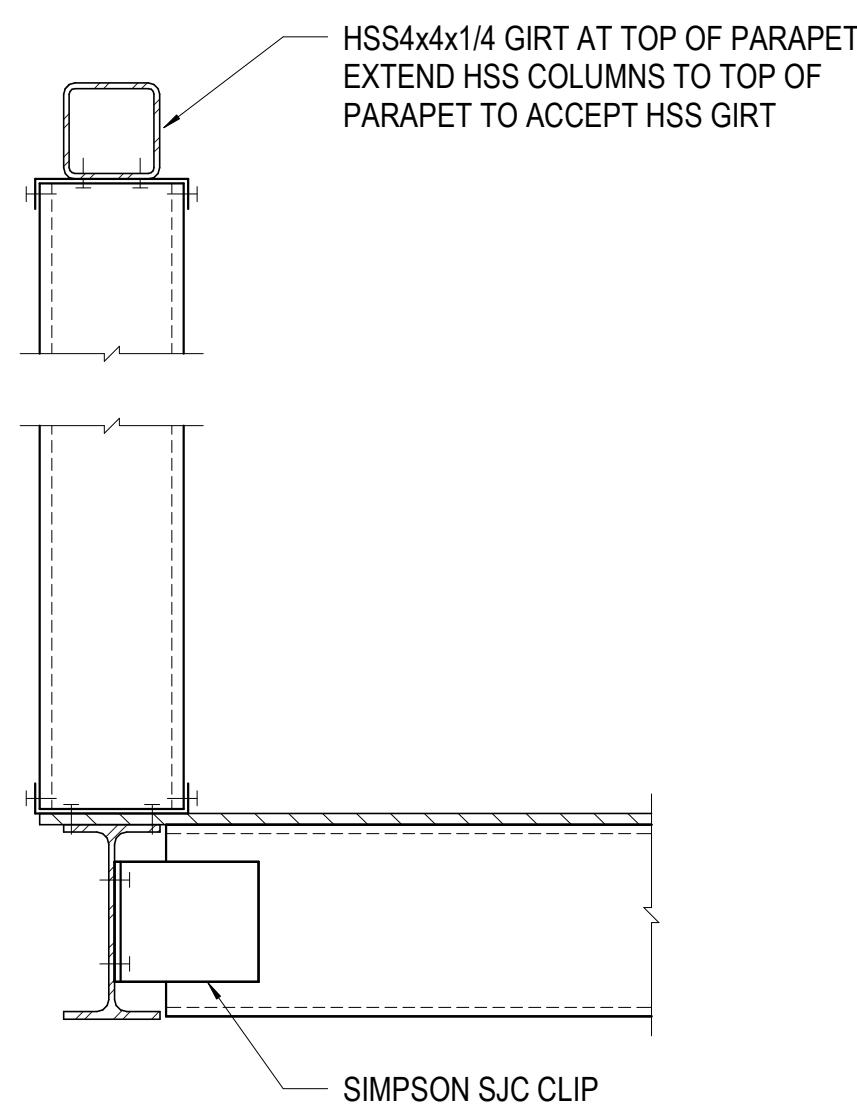
10 TYPICAL STUD TO TRACK  
S-5.4



11 HOLDOWN DETAILS  
S-5.4



12 HSS PARAPET GIRT DETAIL  
S-5.4

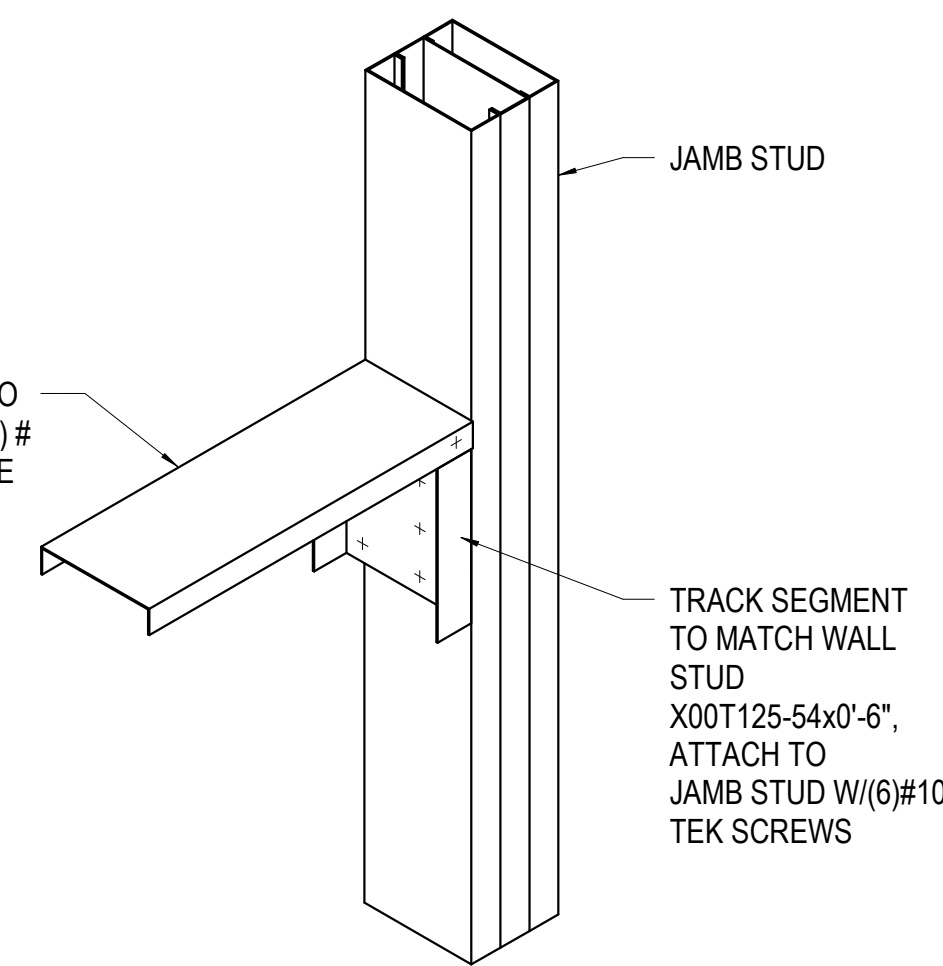


8 TYP CF HEADER  
S-5.4

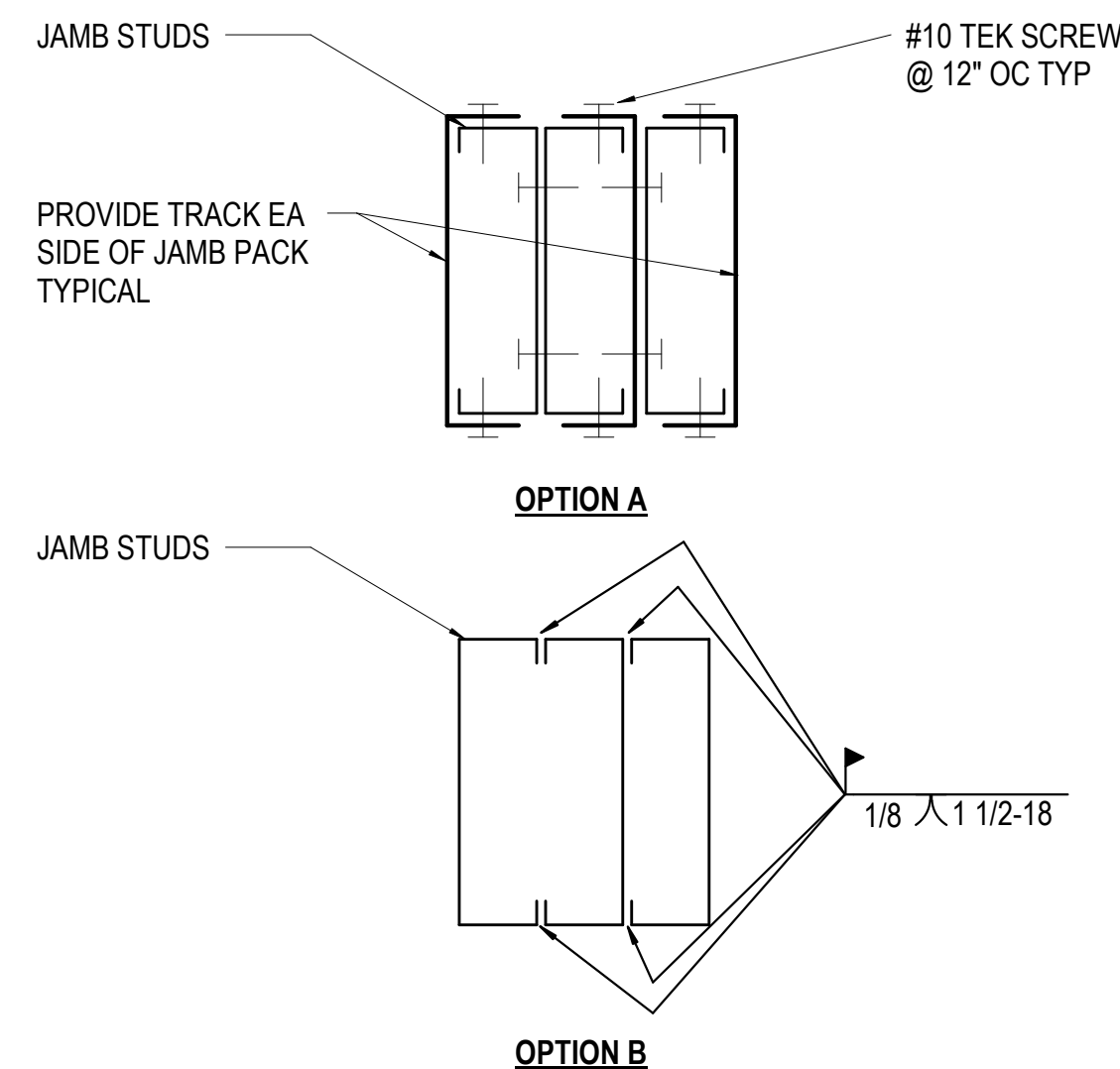
JAMB SCHEDULE	
OPENING WIDTH	TYPICAL AREAS
6'-0"	(2) 600S162-54
6'-0"	(3) 600S162-54

9 TYP CF JAMB SCHEDULE  
S-5.4

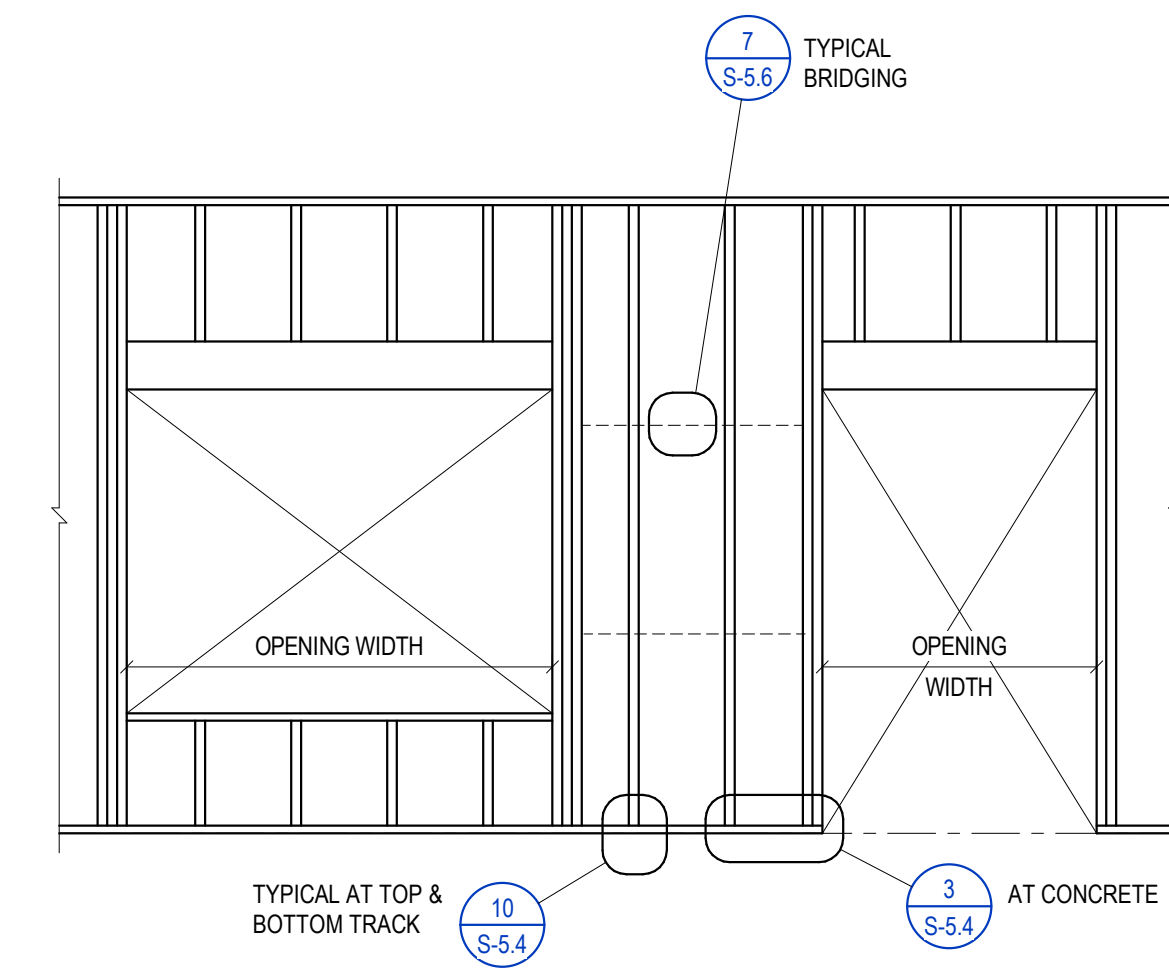
SILL TRACK ATTACH TO TRACK SEGMENT W/(1) #10 TEK SCREW EA SIDE



OPNG WIDTH	TYPICAL AREAS	
	HEADER	SILL
6'-0"	(2) 600S162-43 AND (2) 600T125-43	600T125-43
8'-0"	(2) 800S162-43 AND (2) 600T125-43	600T125-43

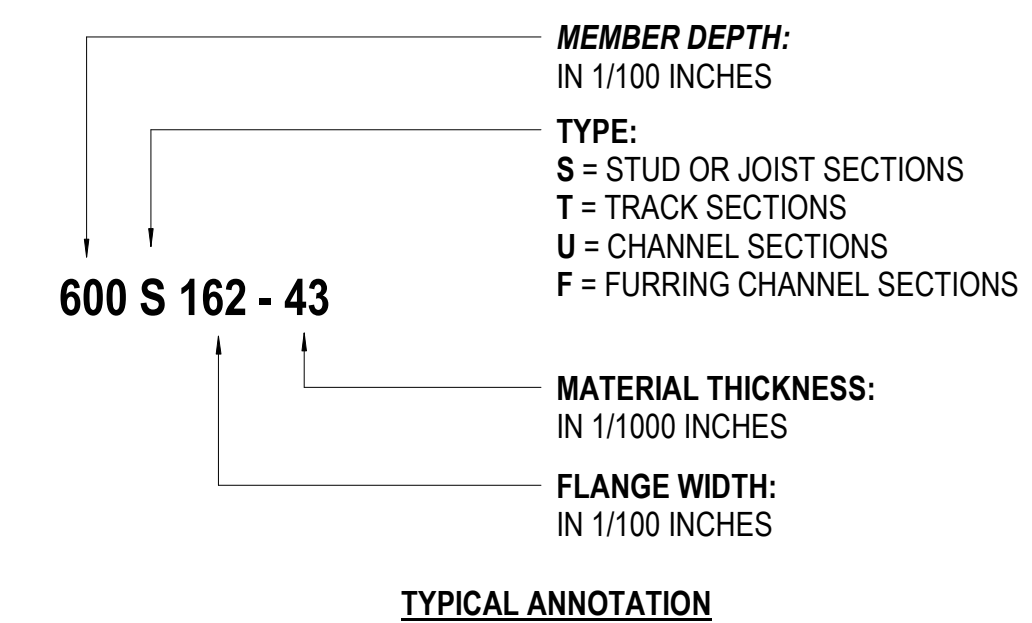


9 TYP CF JAMB SCHEDULE  
S-5.4



1 TYPICAL WALL FRAMING  
S-5.4

SEE 5/ S-5.6 FOR TYPICAL FASTENER INFO  
SEE 3/ S-5.6 FOR TYPICAL PUNCHOUT REINFORCING

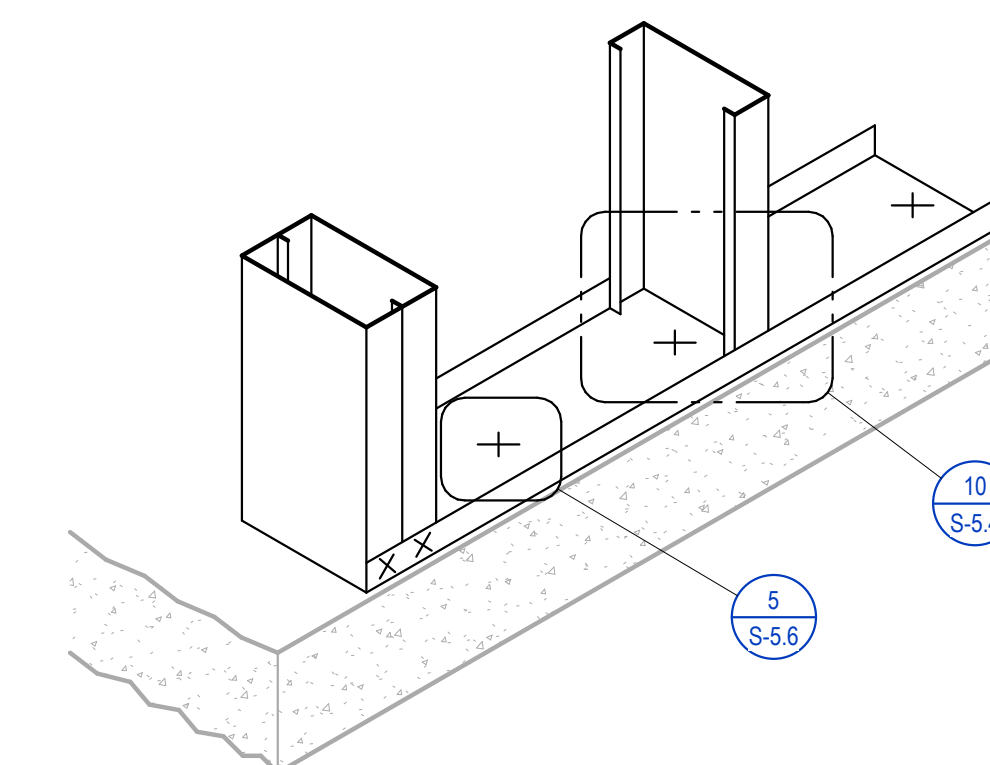


2 TYP CF WALL SCHEDULE  
S-5.4

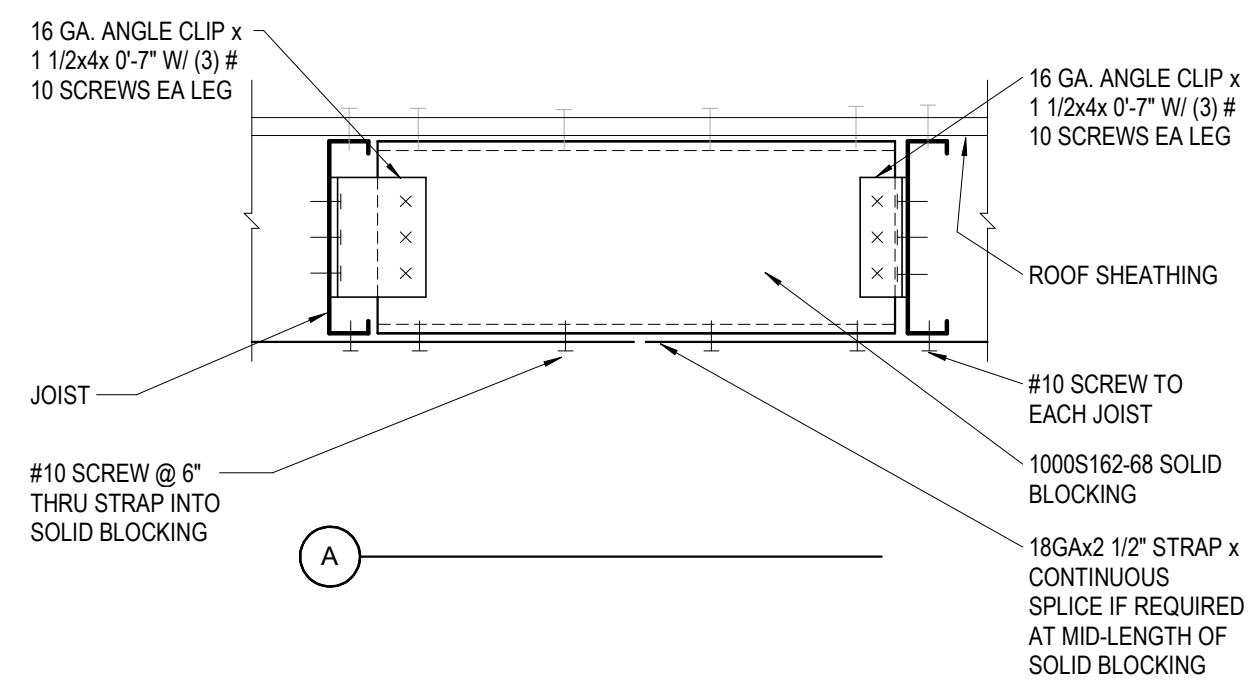
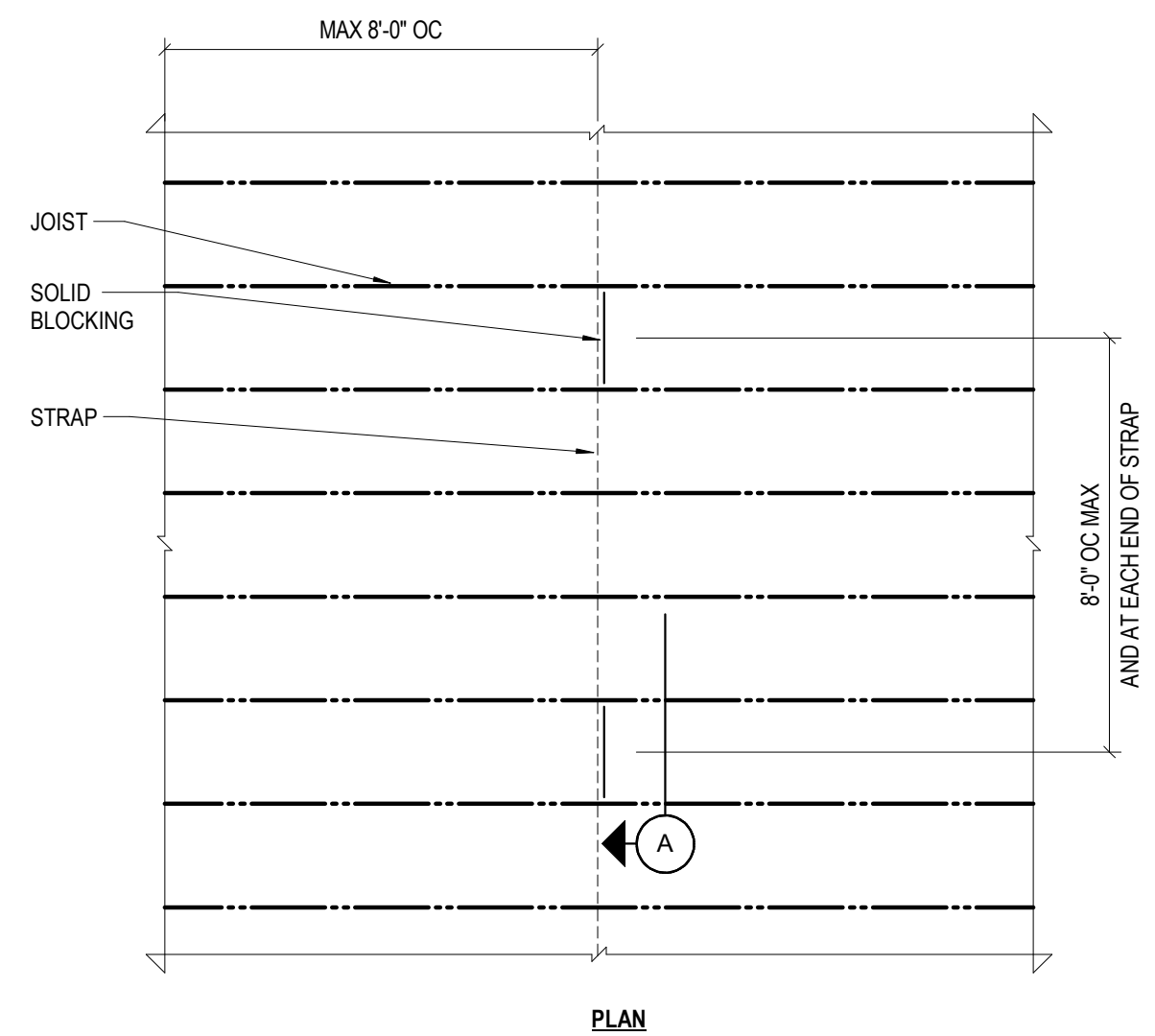
WALL SCHEDULE		
HEIGHT	TYPICAL WALL AREAS	TOP & BOT TRACK
16'-0"	600S162-43 @ 16" OC	600T125-43
35'-0"	800S162-54 @ 16" OC	800T125-43

LOCATION	NUMBER OF FASTENERS REQUIRED
TYPICAL FRAMING	(2) 0.157"Ø PAF @ 16" OC
JAMBS	(4) 0.157"Ø PAFs PER JAMB STUD

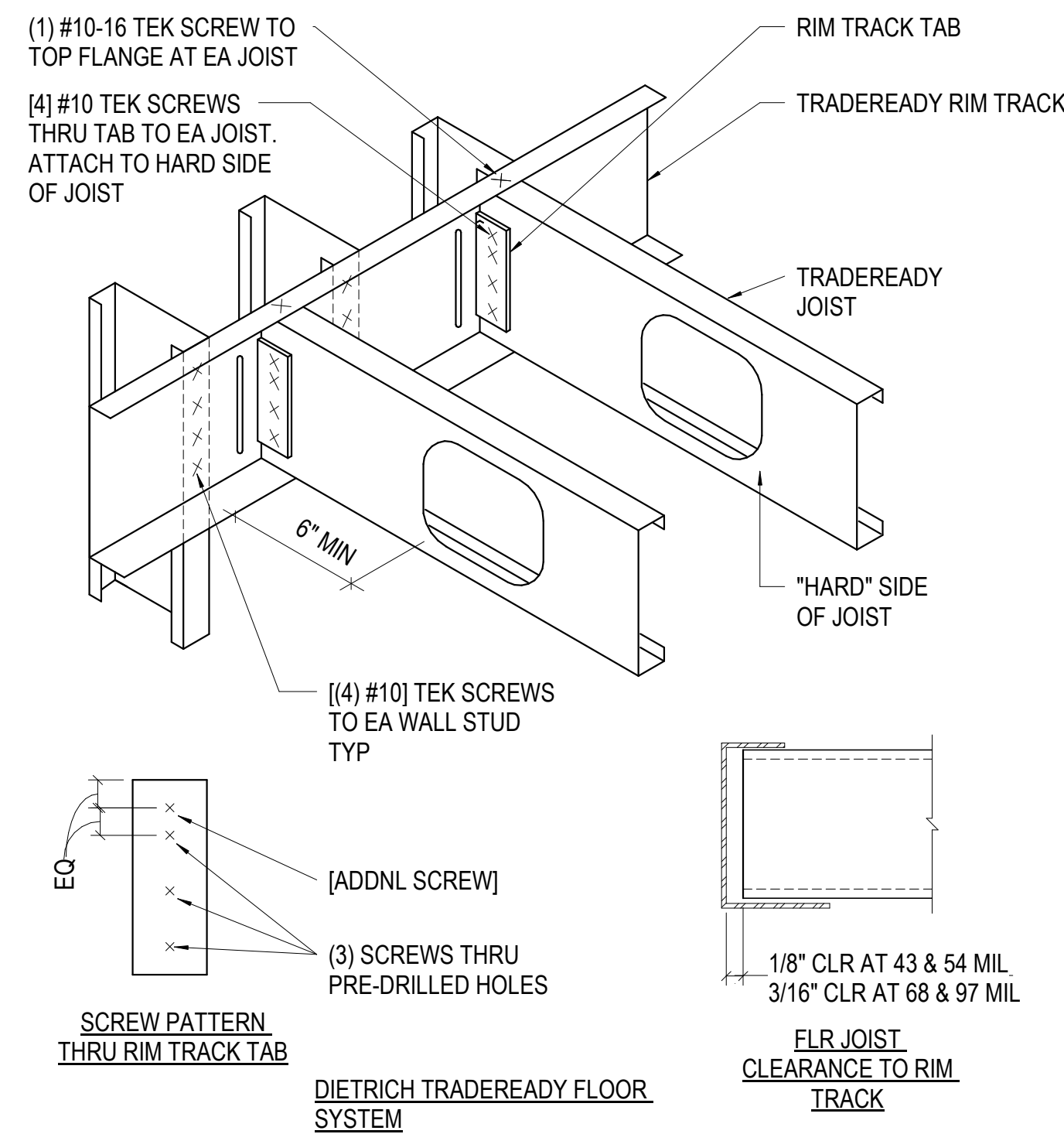
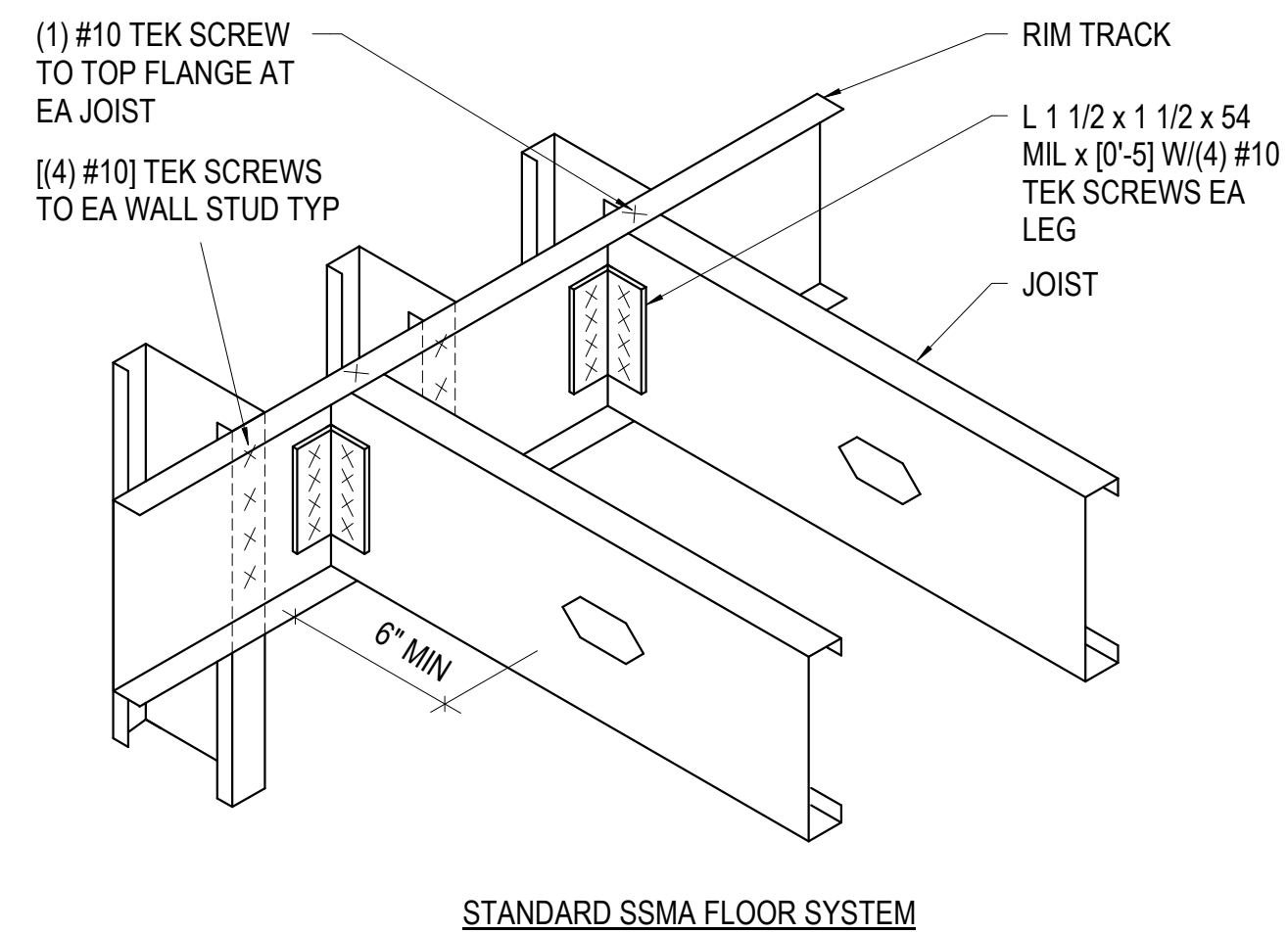
NOTES:  
1. 1 1/4" EMBED REQUIRED FOR ALL PAFs  
2. FOR JAMBS SEE:



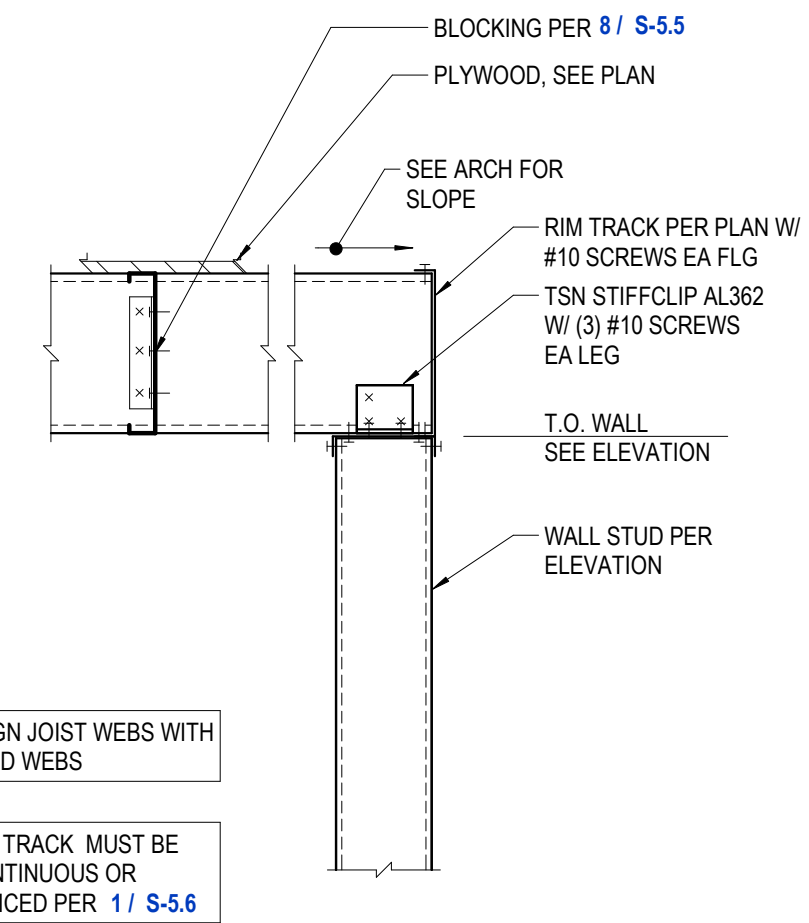
3 BOTTOM TRACK TO CONCRETE  
S-5.4



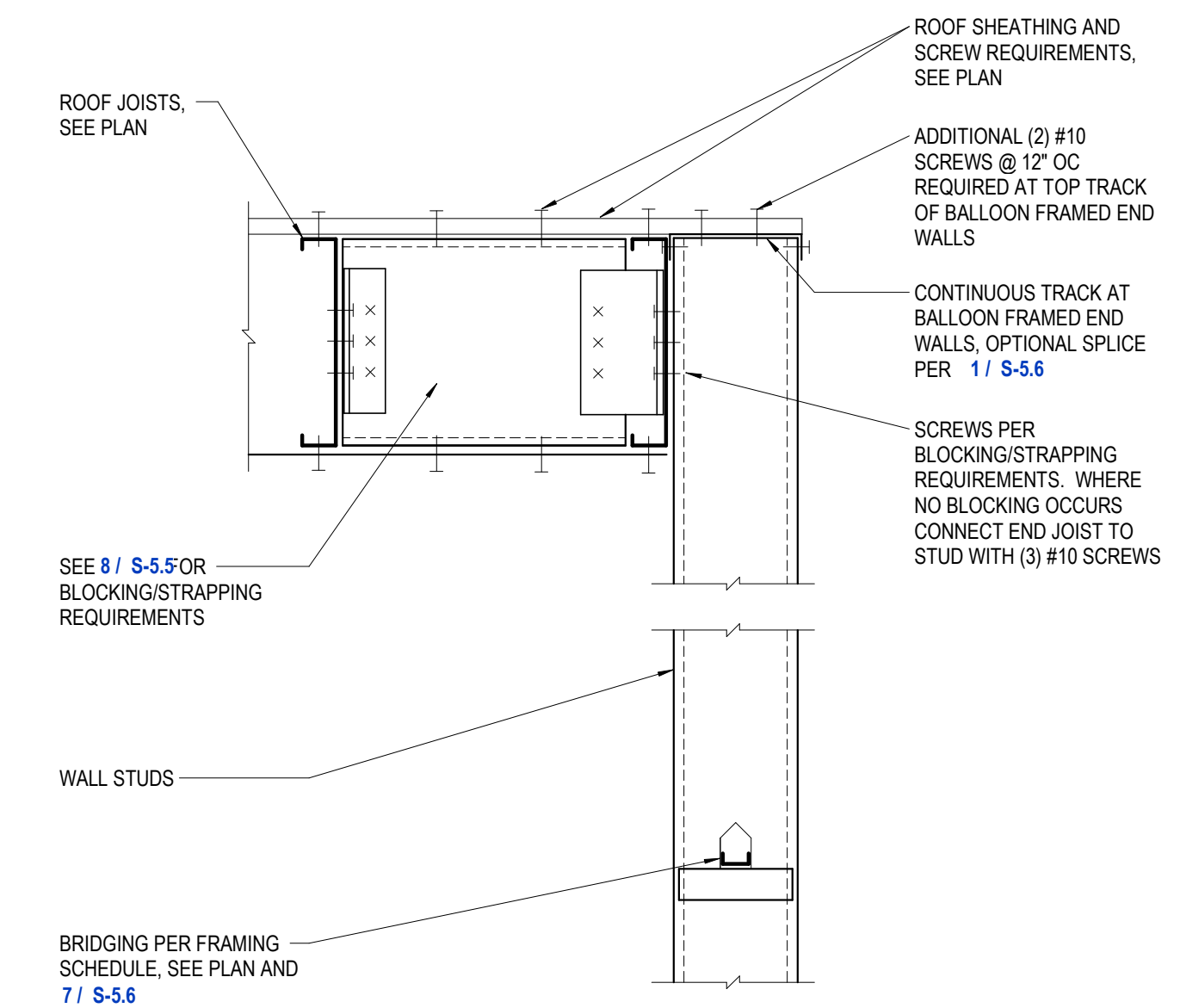
8 LB STRUCTURAL BLOCKING OF JOISTS S-5.5



5 TYP CF LB JOIST END CONN TO RIM TRACK S-5.5



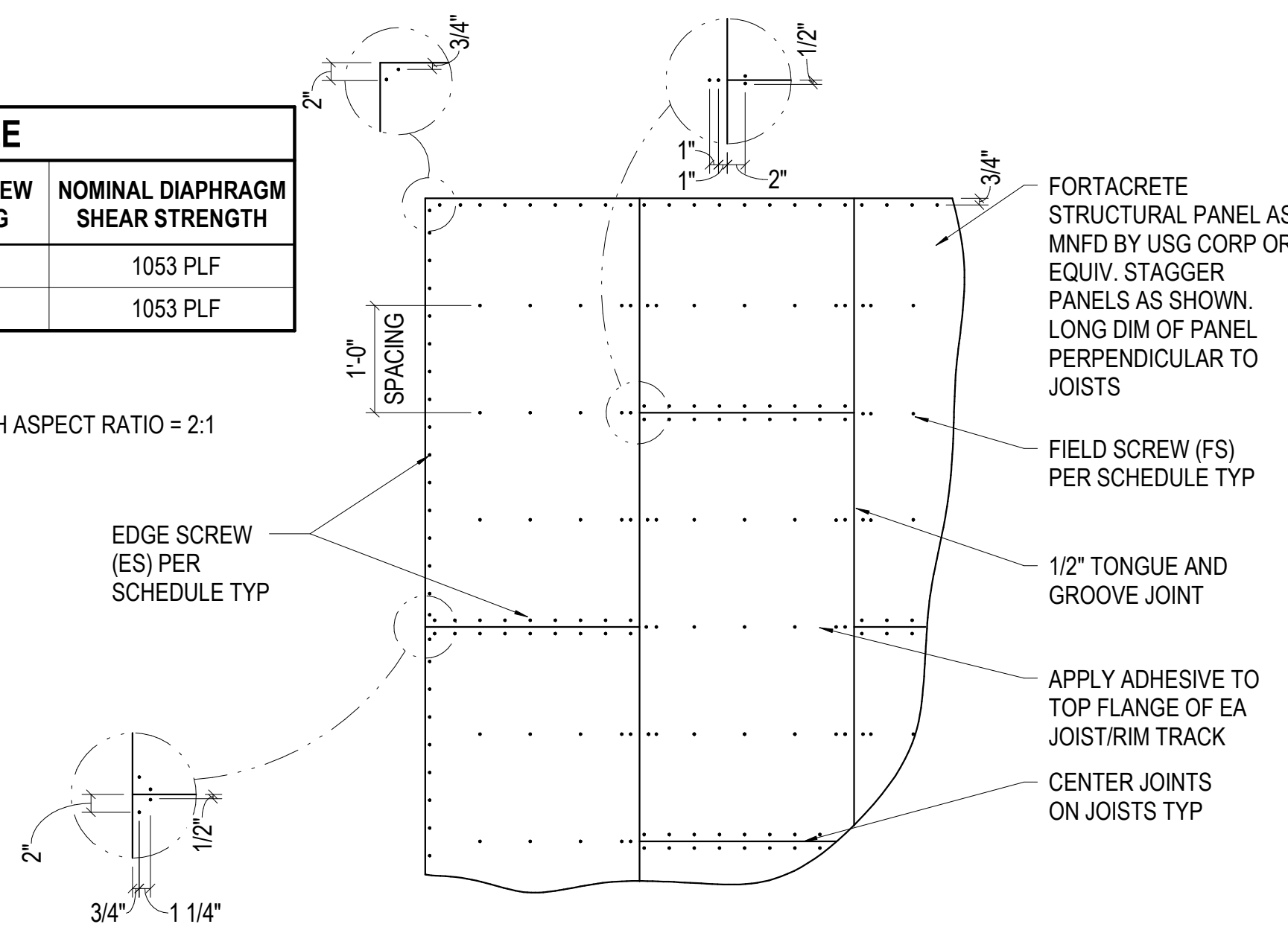
1 SECTION AT ROOF S-5.5



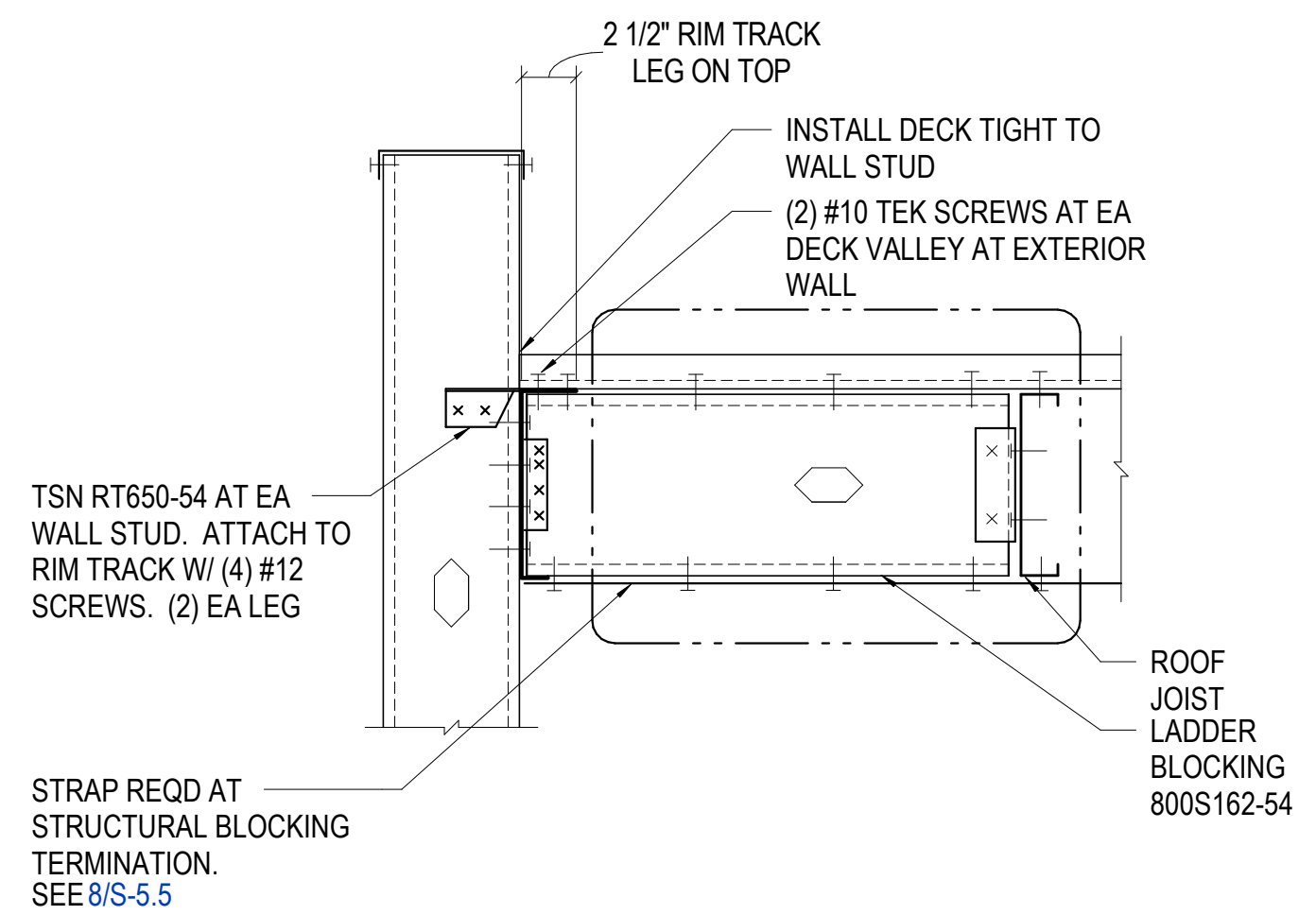
2 SECTION AT END WALLS S-5.5

DIAPHRAGM FASTENER SCHEDULE					
LEVEL	PANEL THICKNESS	SCREW SIZE	EDGE SCREW SPACING	FIELD SCREW SPACING	NOMINAL DIAPHRAGM SHEAR STRENGTH
FLOOR	23/32"	#8-18	6"	12"	1053 PLF
ROOF	19/32"	#8-18	6"	12"	1053 PLF

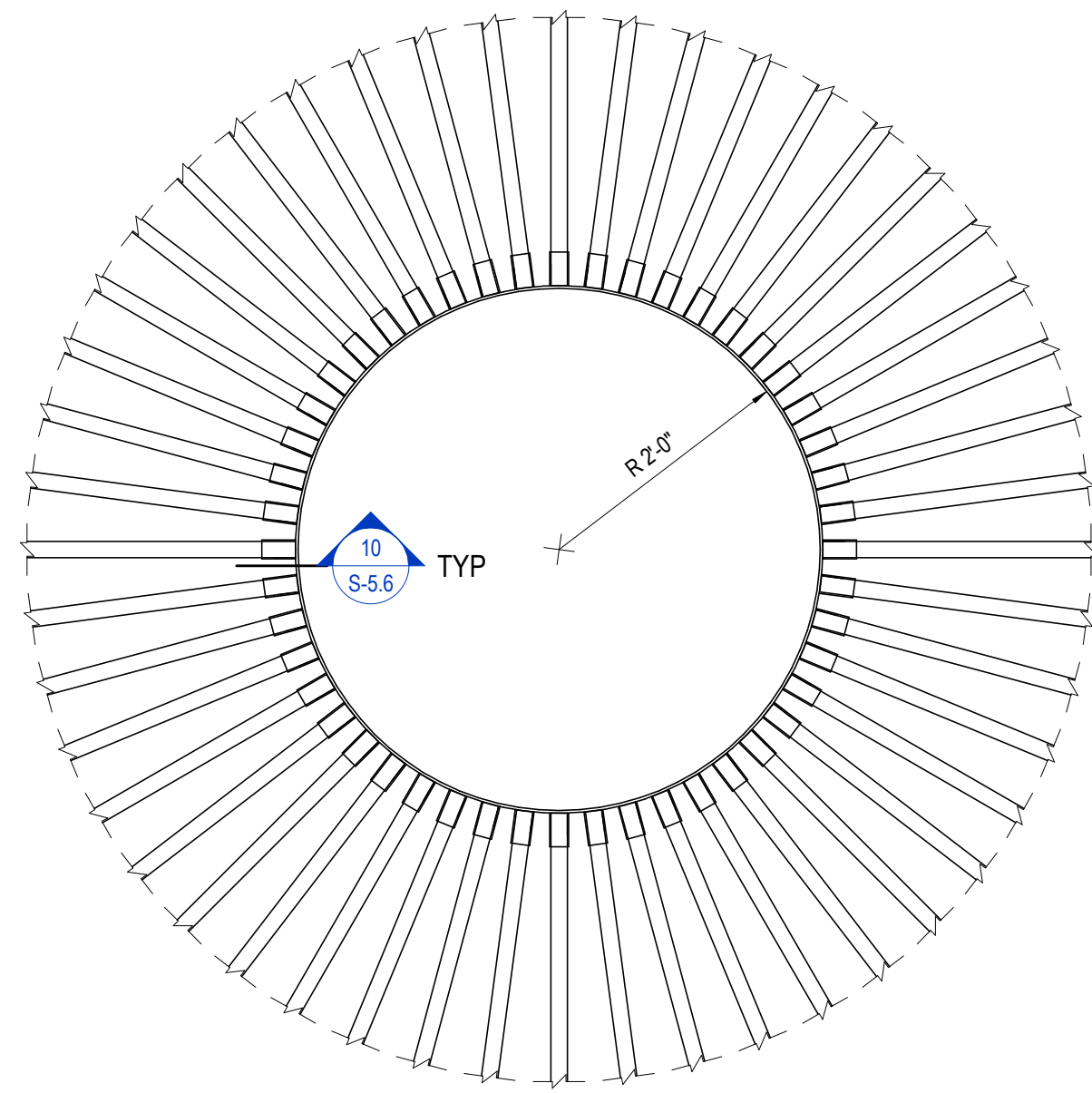
- NOTES:
- #8 TEK SCREWS ARE 1 5/8" LONG WITH A 0.363 "Ø HEAD
  - DIAPHRAGM SHEAR STRENGTH IS FOR AN UNBLOCKED DIAPHRAGM WITH ASPECT RATIO = 2:1 MAX



9 TYP CF LB DIAPHRAGM SHEATHING PLAN (FORTACRETE) S-5.5



3 TYP CF LB BLOCKING AT EXTERIOR WALL S-5.5



NOTES:  
 • PROVIDE BRIDGING AT 5'-0" OC MAX VERTICALLY

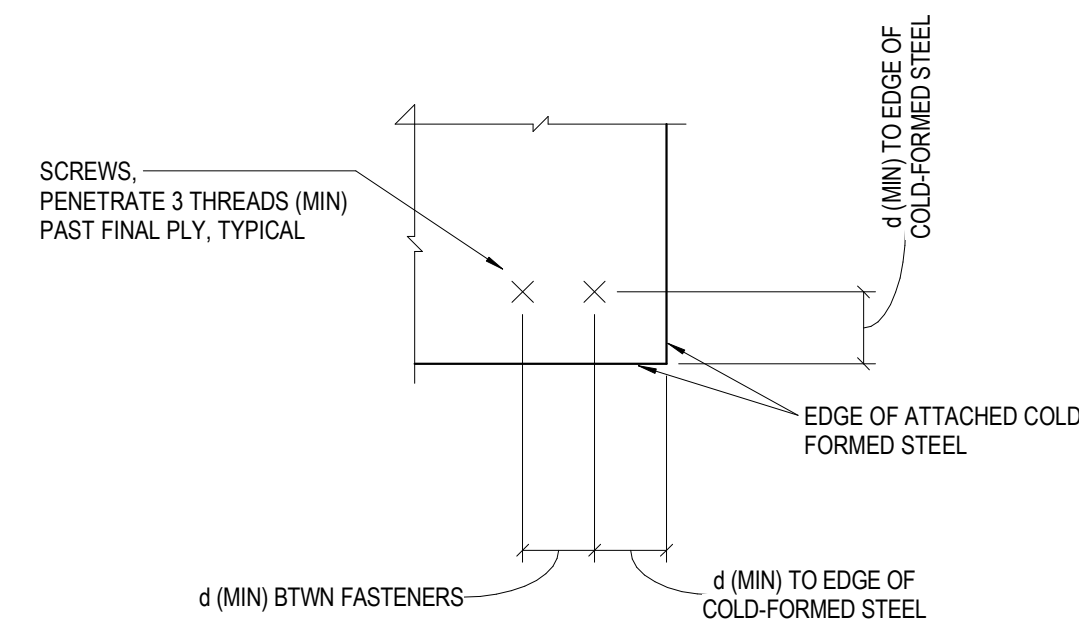
L 1 1/2x1 1/2x16 GA FASTENED TO STUD WITH (3) #10 SCREWS. ANGLE LENGTH = d - 1/2". LOCATE SCREWS 3/4" FROM EACH END OF CLIP ANGLE

CONTINUOUS 150U50-54 AT SPLICES SEE: 2 / S-5.6

(2) #10 SCREW TO ATTACH BRIDGING TO CLIP ANGLE

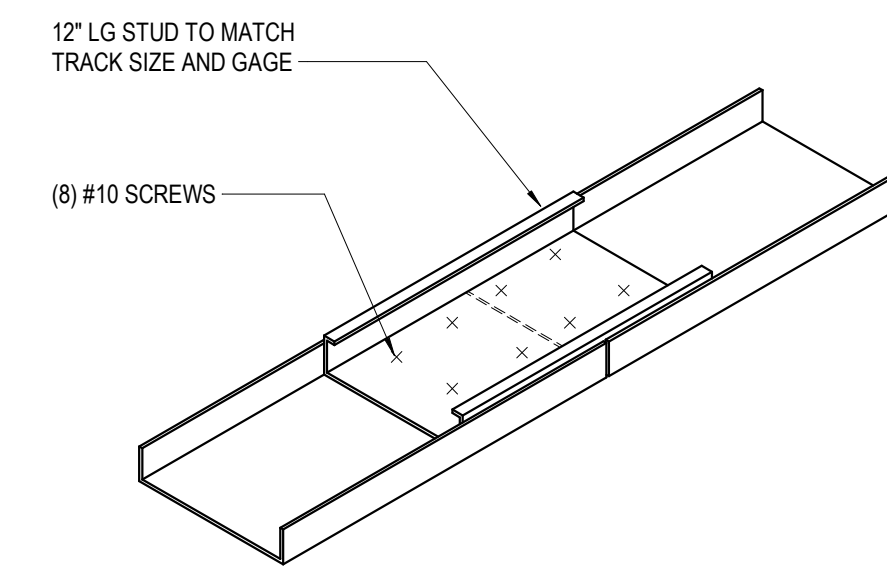
7 TYPICAL WALL BRIDGING  
 S-5.6

SELF-DRILLING SCREW SIZE	d
#10	5/8"
#12	3/4"



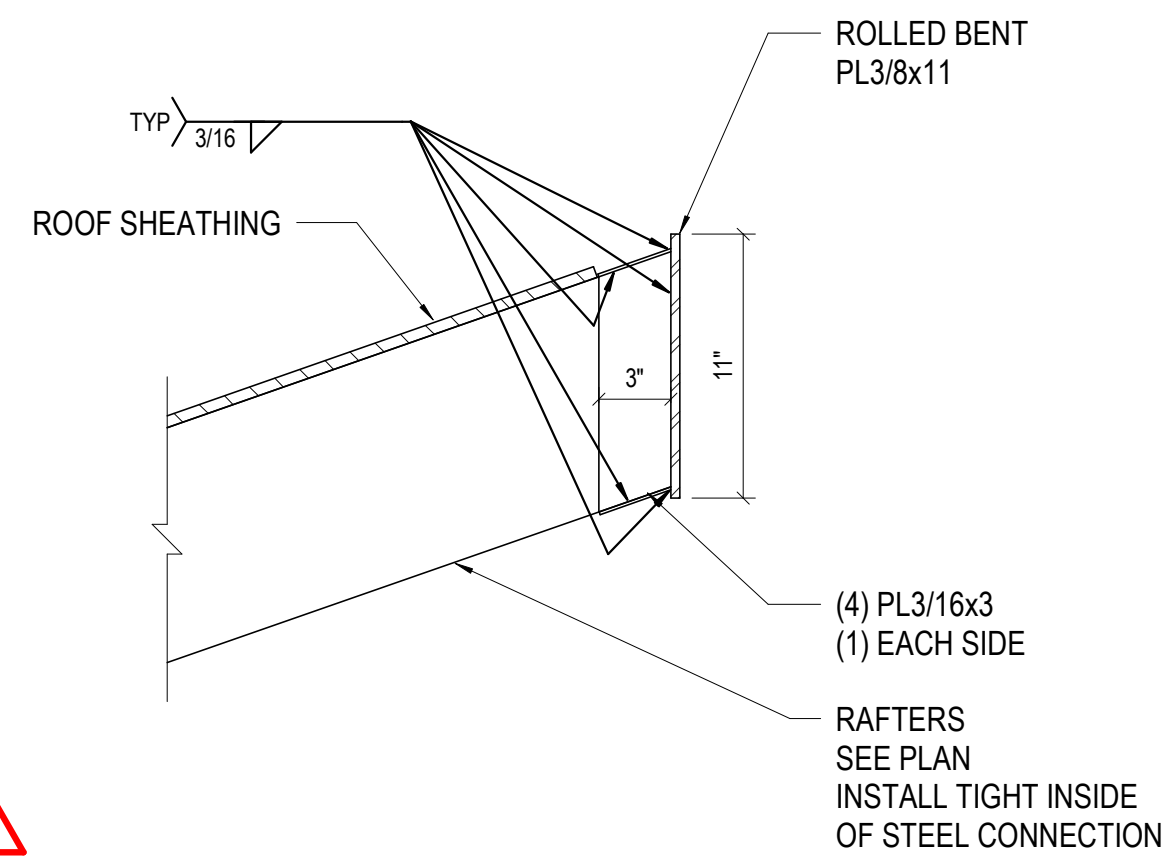
TYPICAL SCREW PLACEMENT

1 TRACK SPLICE  
 S-5.6

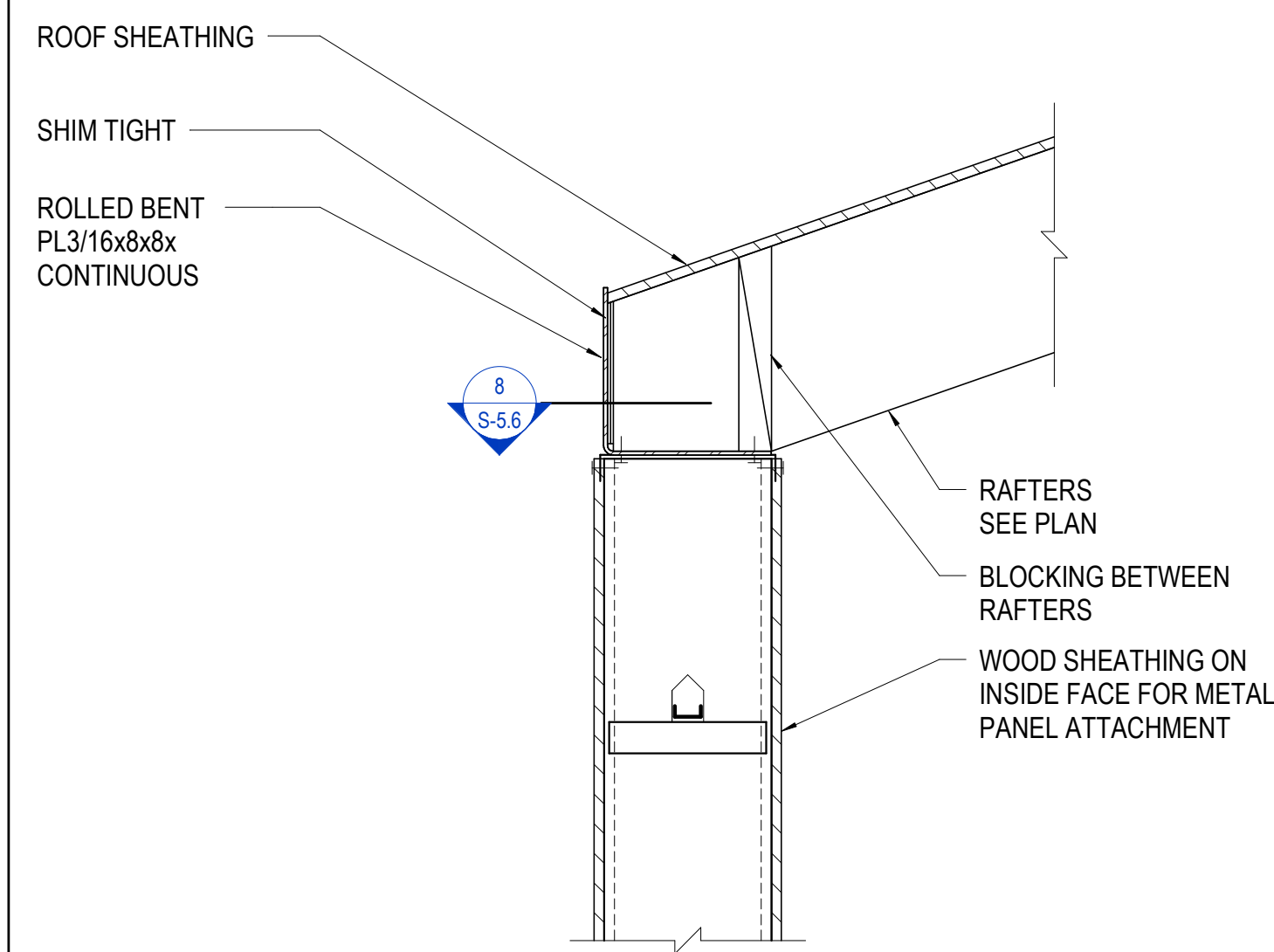


NOTES:  
 • AT BOTTOM TRACK, SPLICE CENTERED BETWEEN STUDS, STUD SECTION NOT REQUIRED.  
 • AT TOP DEFLECTION TRACK, SPLICE CENTERED BETWEEN STUDS, STUD SECTION NOT REQUIRED.  
 • AT TOP TRACK OF BYPASS WALL, SPLICE CENTERED ON STUDS OR SPLICE CENTERED BETWEEN STUD WITH STUD SECTION AS SHOWN

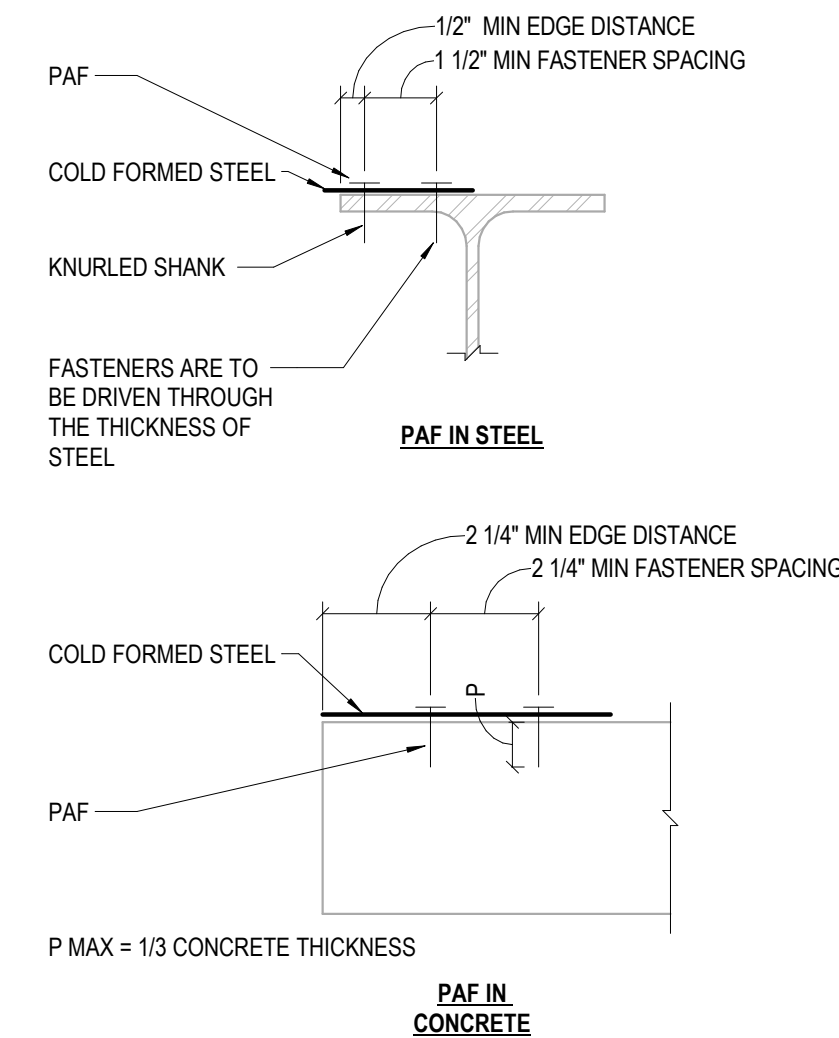
9 COMPRESSION RING PLAN  
 S-5.6



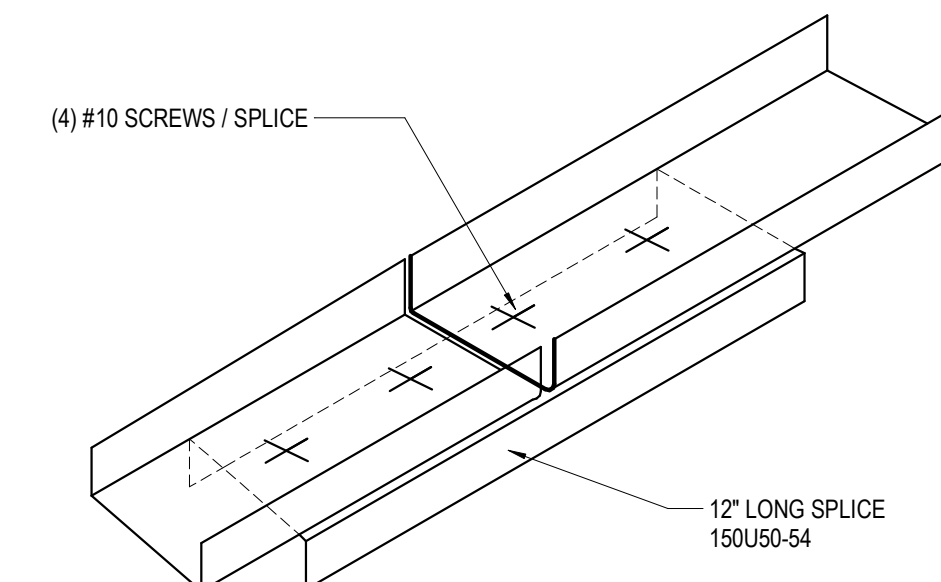
10 GRAIN BIN ROOF AT COMPRESSION RING  
 S-5.6



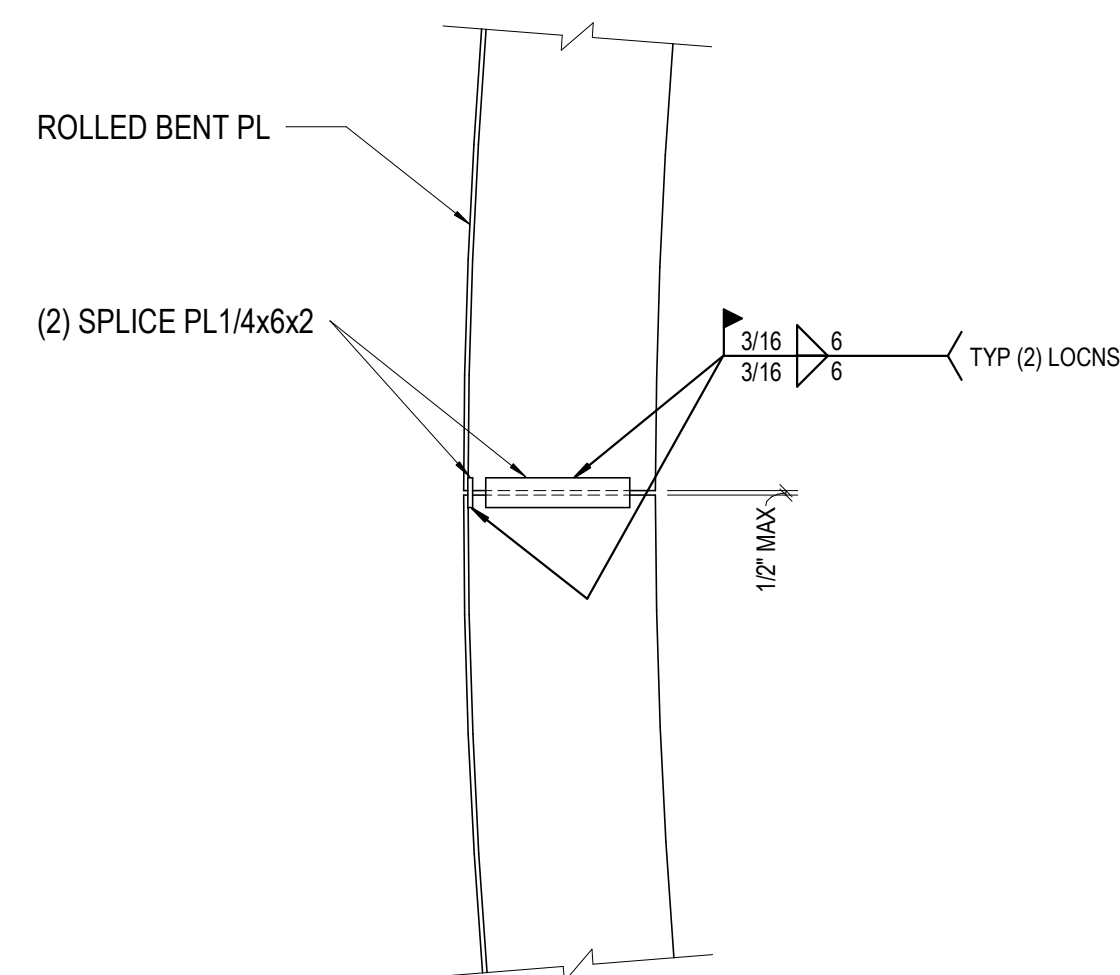
4 GRAIN BIN ROOF AT TOP OF WALL  
 S-5.6



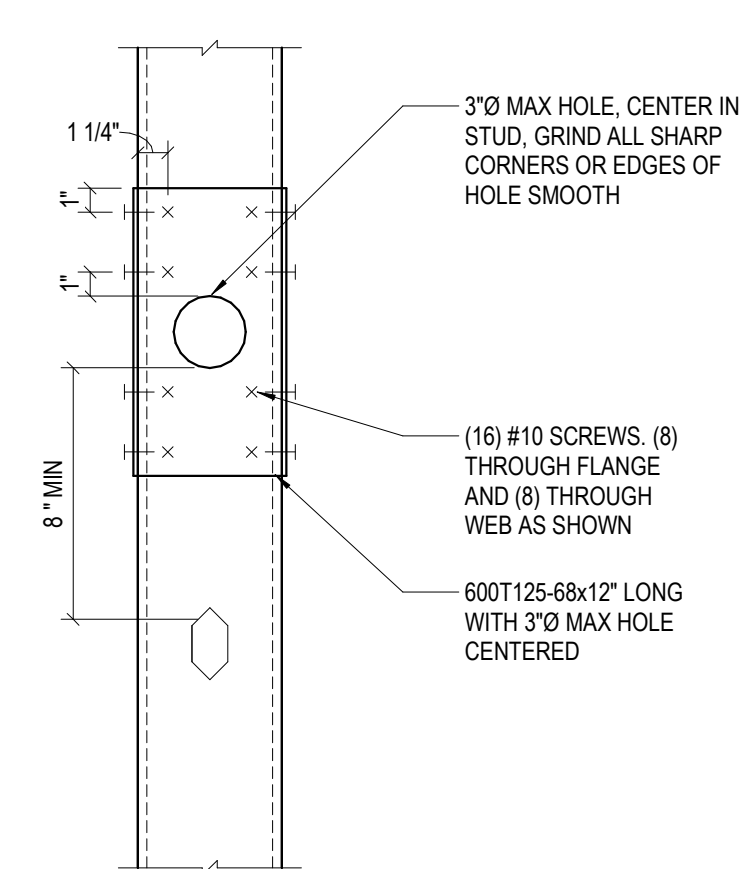
5 TYPICAL FASTENER DETAILS  
 S-5.6



2 TYPICAL BRIDGING SPLICE  
 S-5.6

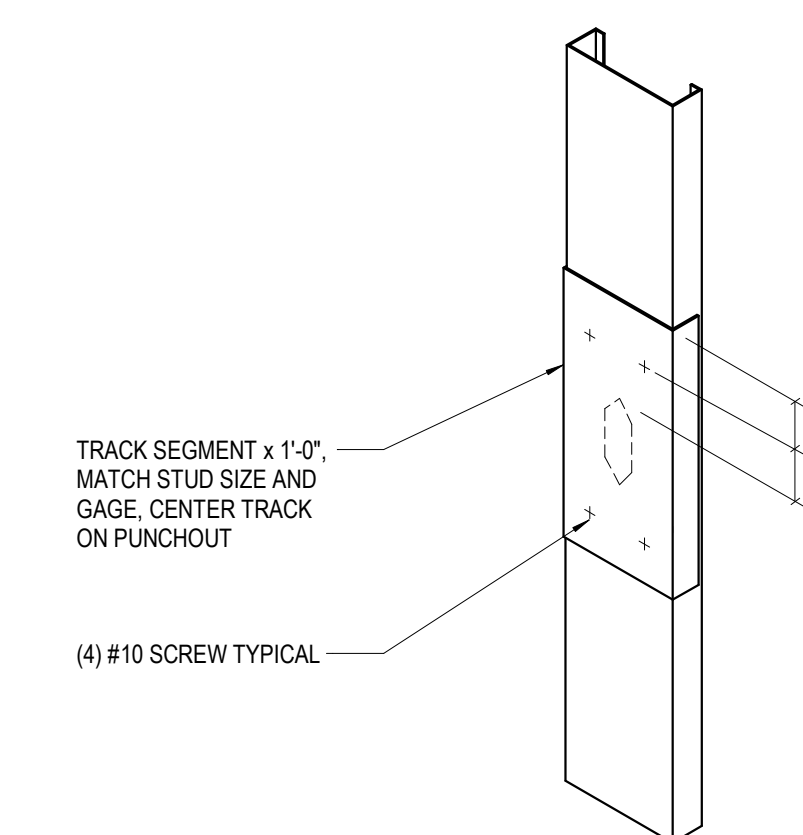


8 TENSION RING SPLICE  
 S-5.6



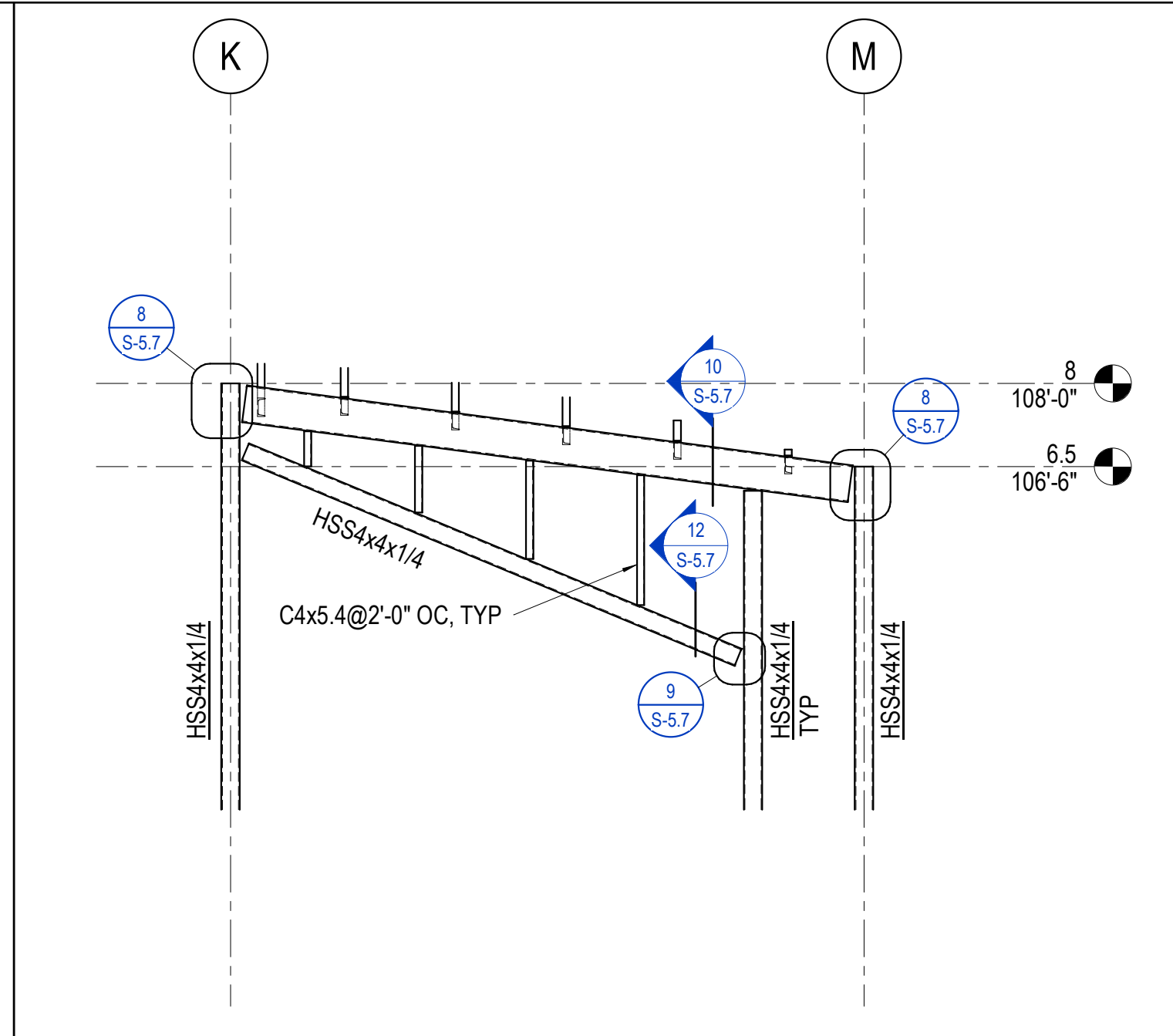
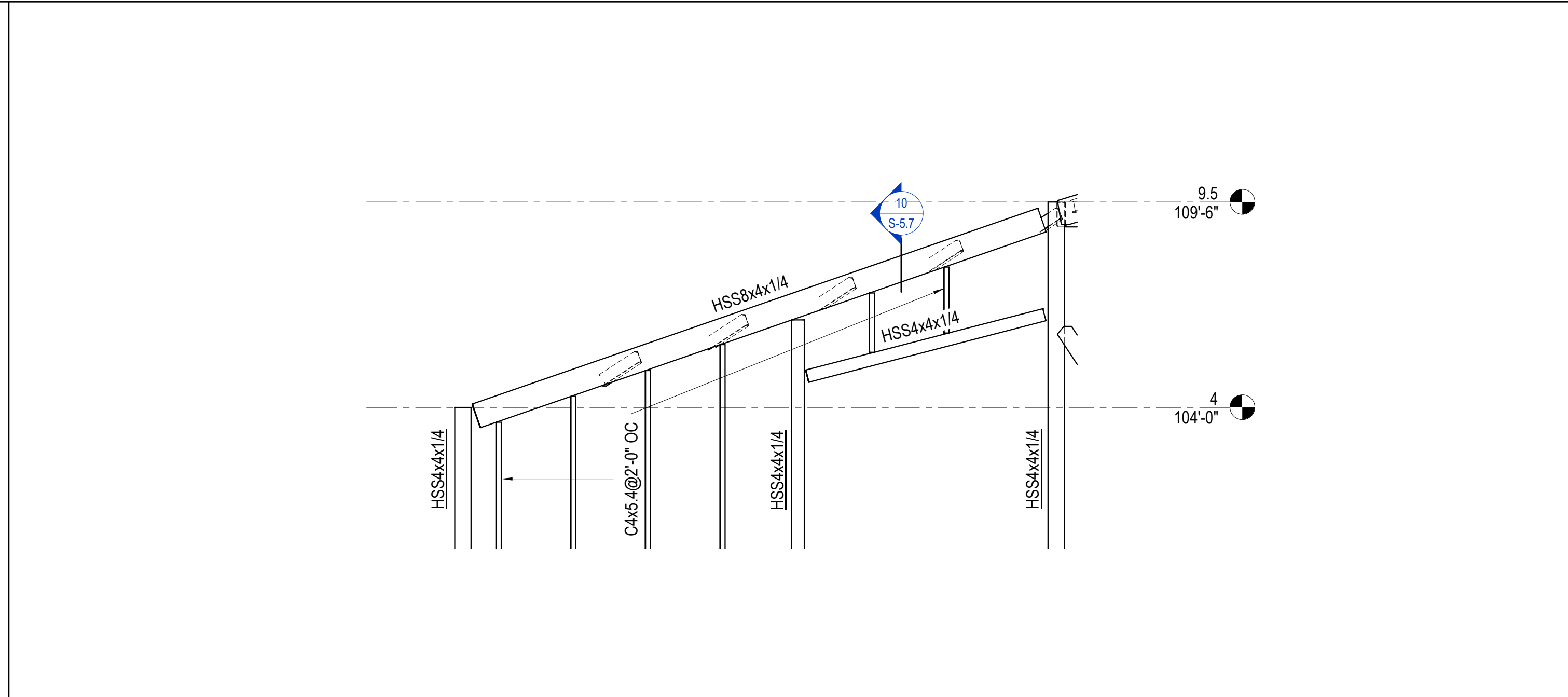
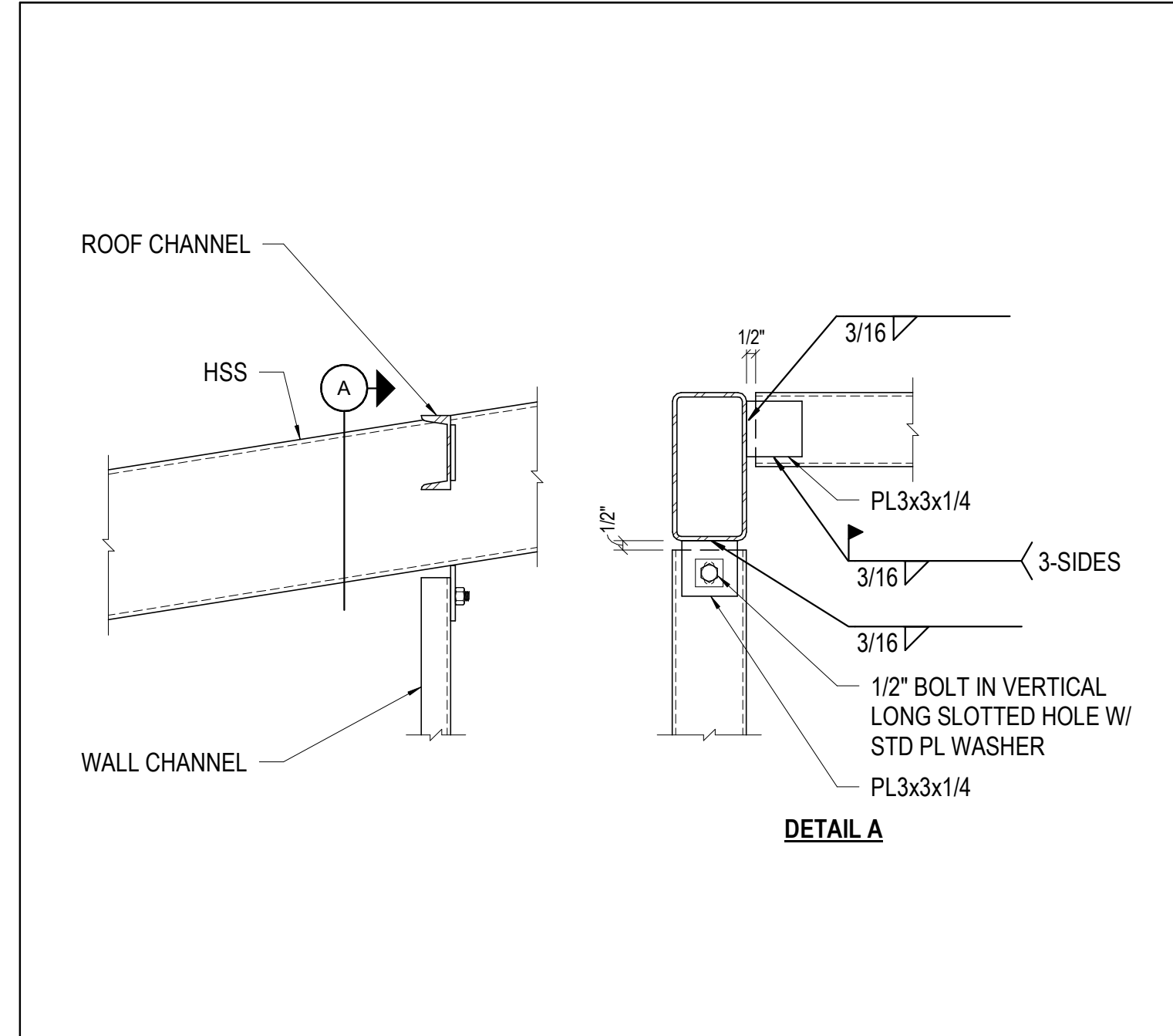
NOTES:  
 • HOLES MUST BE 12" MINIMUM FROM TOP TRACK, BOTTOM TRACK, AND CONNECTIONS TO STRUCTURE  
 • HOLES MUST BE 12" MINIMUM APART IN STUD

6 TYPICAL REINFORCING FOR HOLE THROUGH WALL  
 S-5.6



NOTE:  
 • REINFORCING REQUIRED WHEN PUNCHOUT LOCATION SPECIFIED IN OTHER DETAILS CANNOT BE ACHIEVED

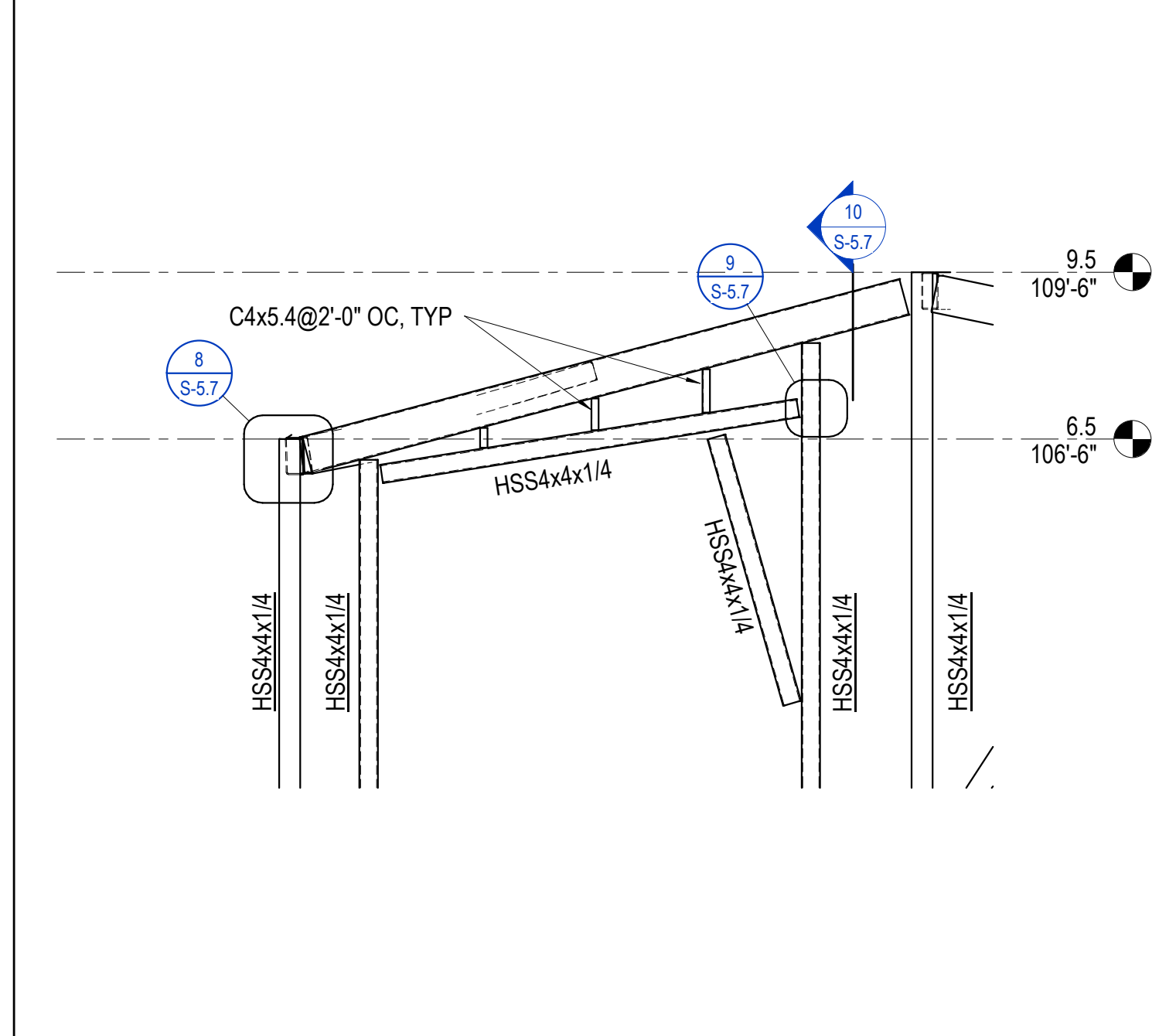
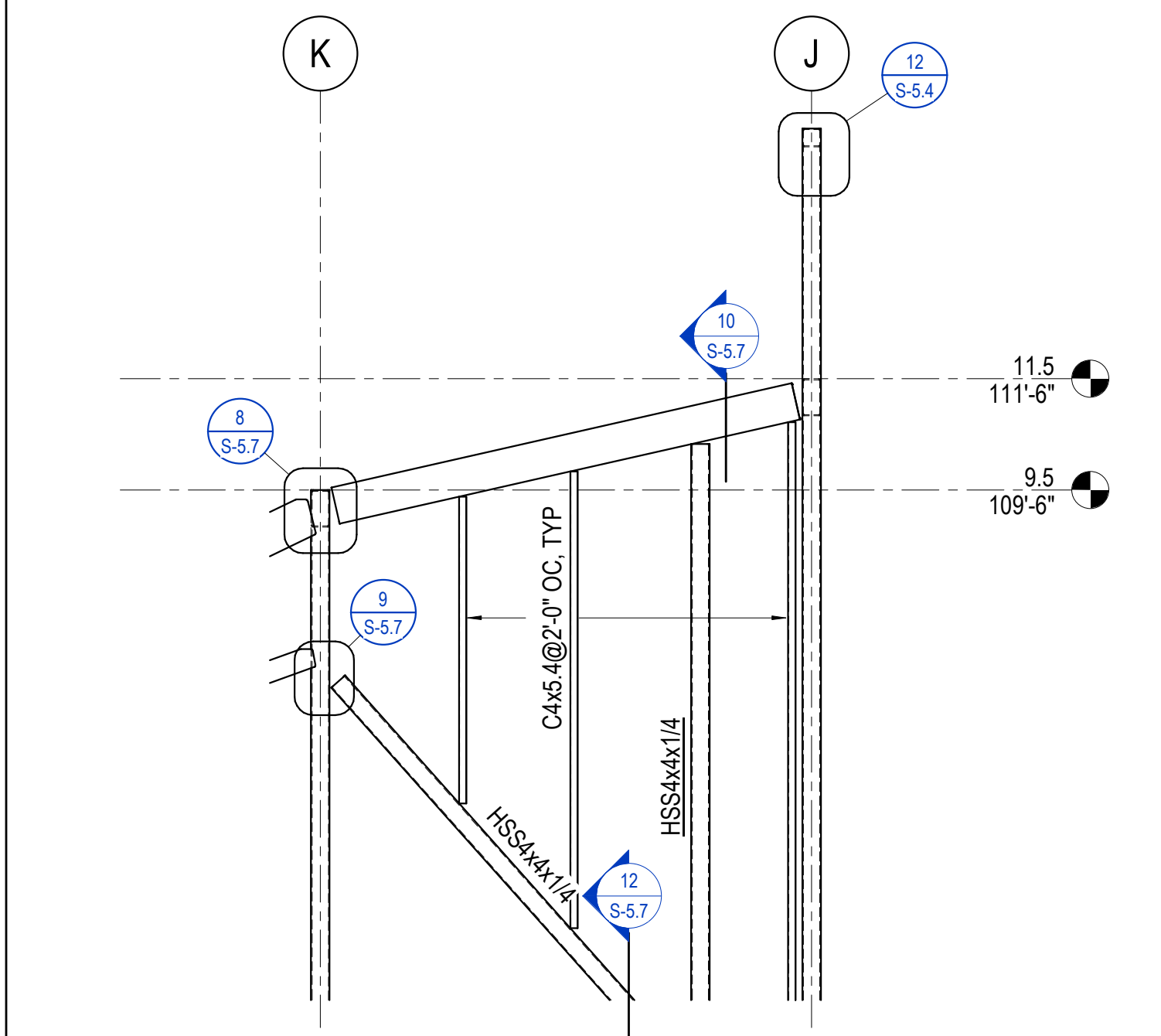
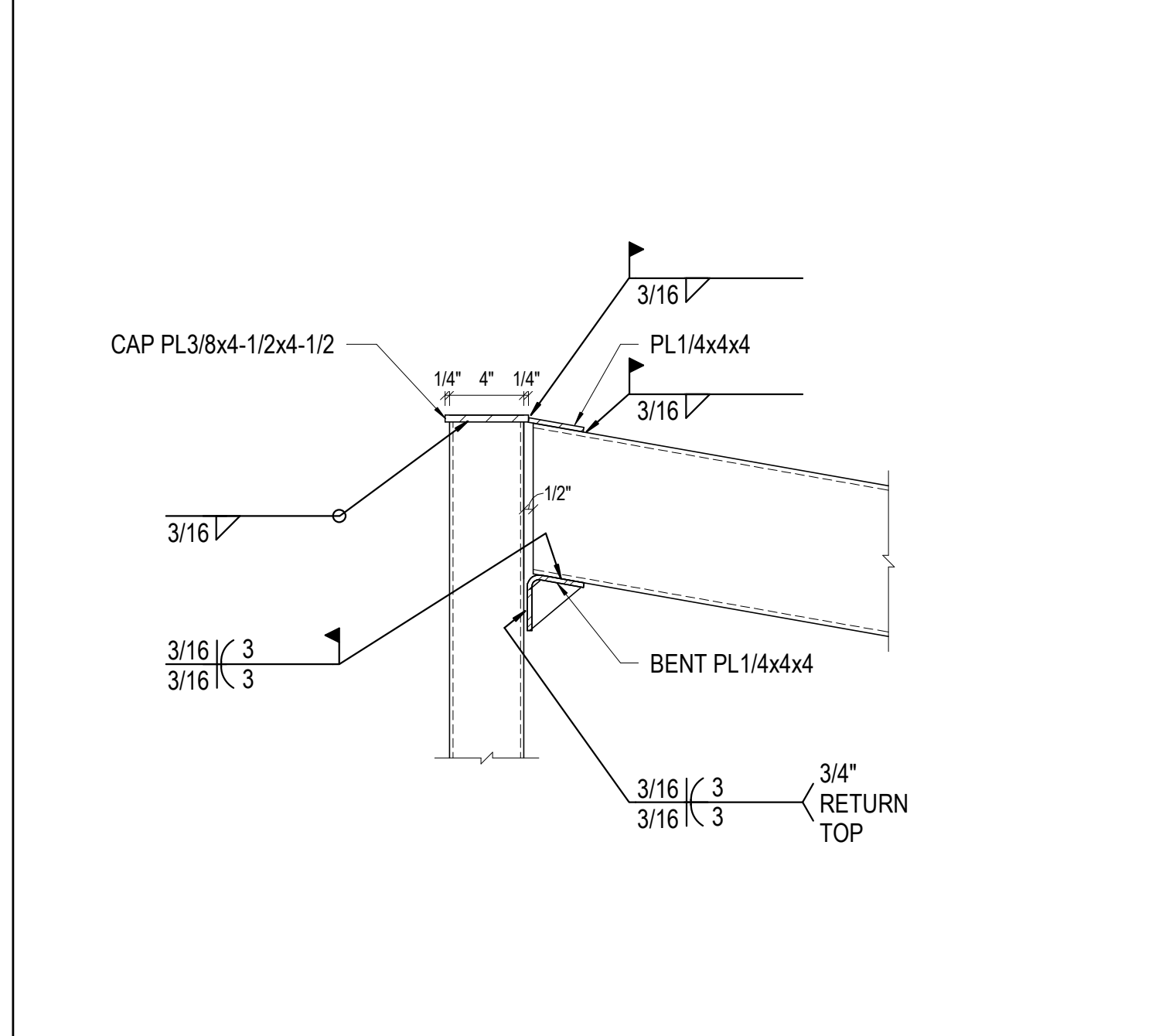
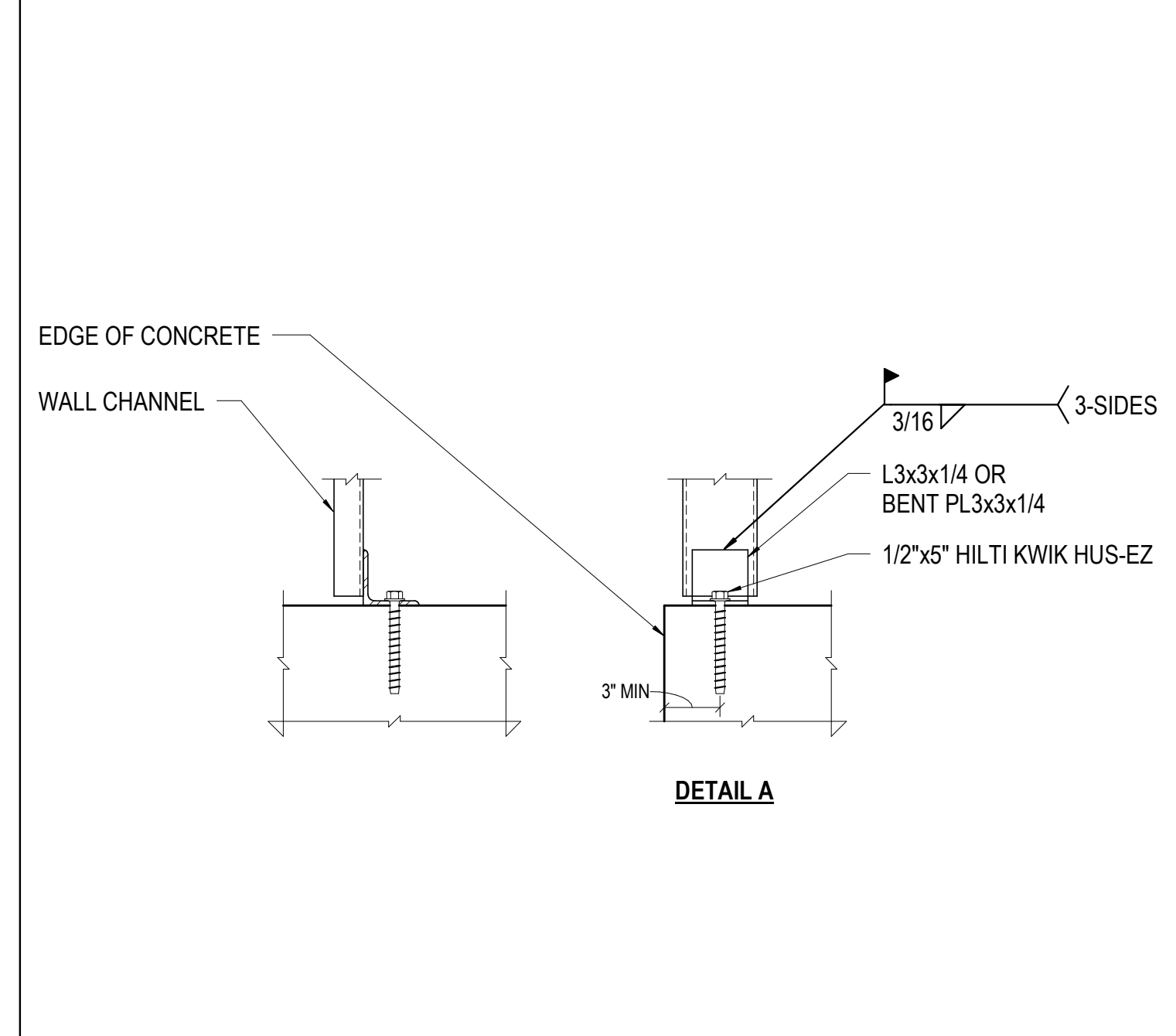
3 TYPICAL PUNCHOUT REINFORCING  
 S-5.6



10 TYPICAL CANOPY CONNECTIONS  
S-5.7

7 CANOPY WALL ELEVATION  
S-5.7

1 CANOPY WALL ELEVATION  
S-5.7

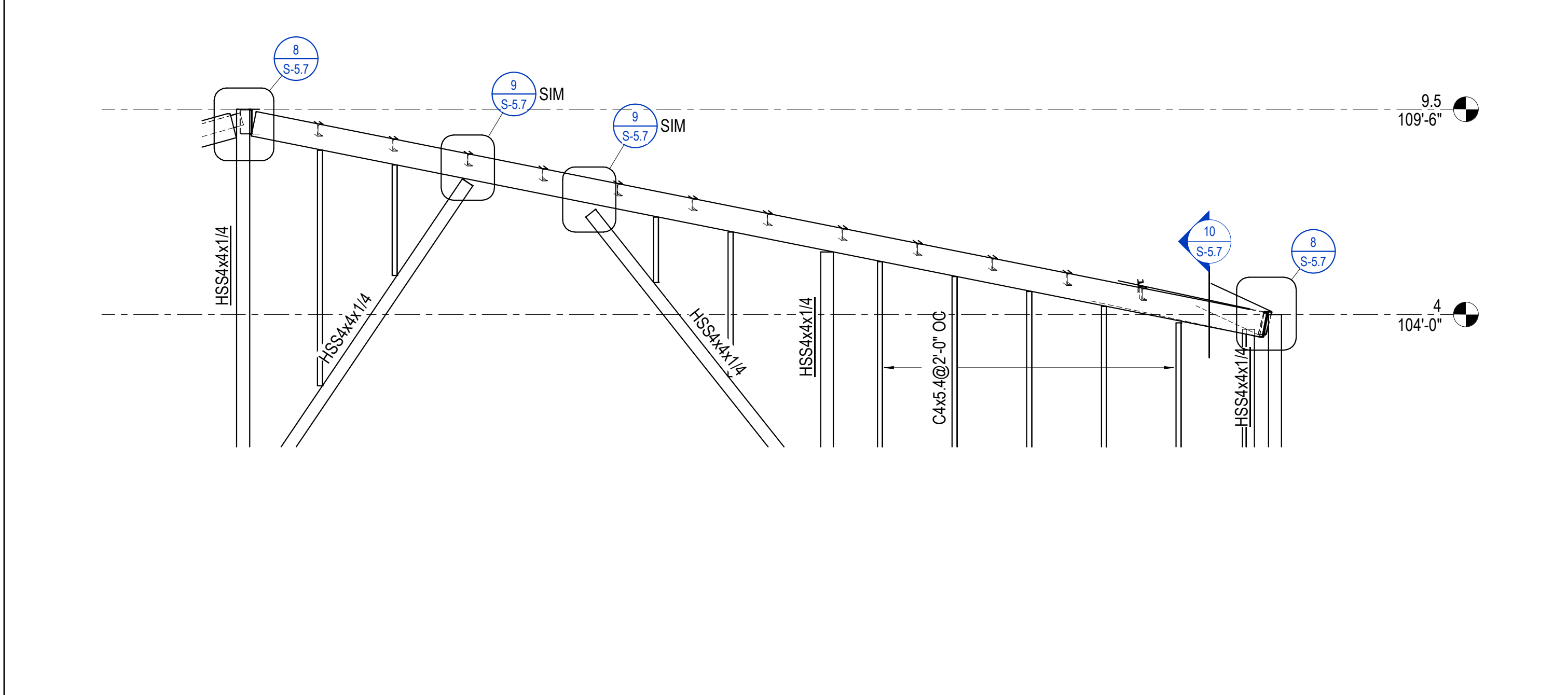
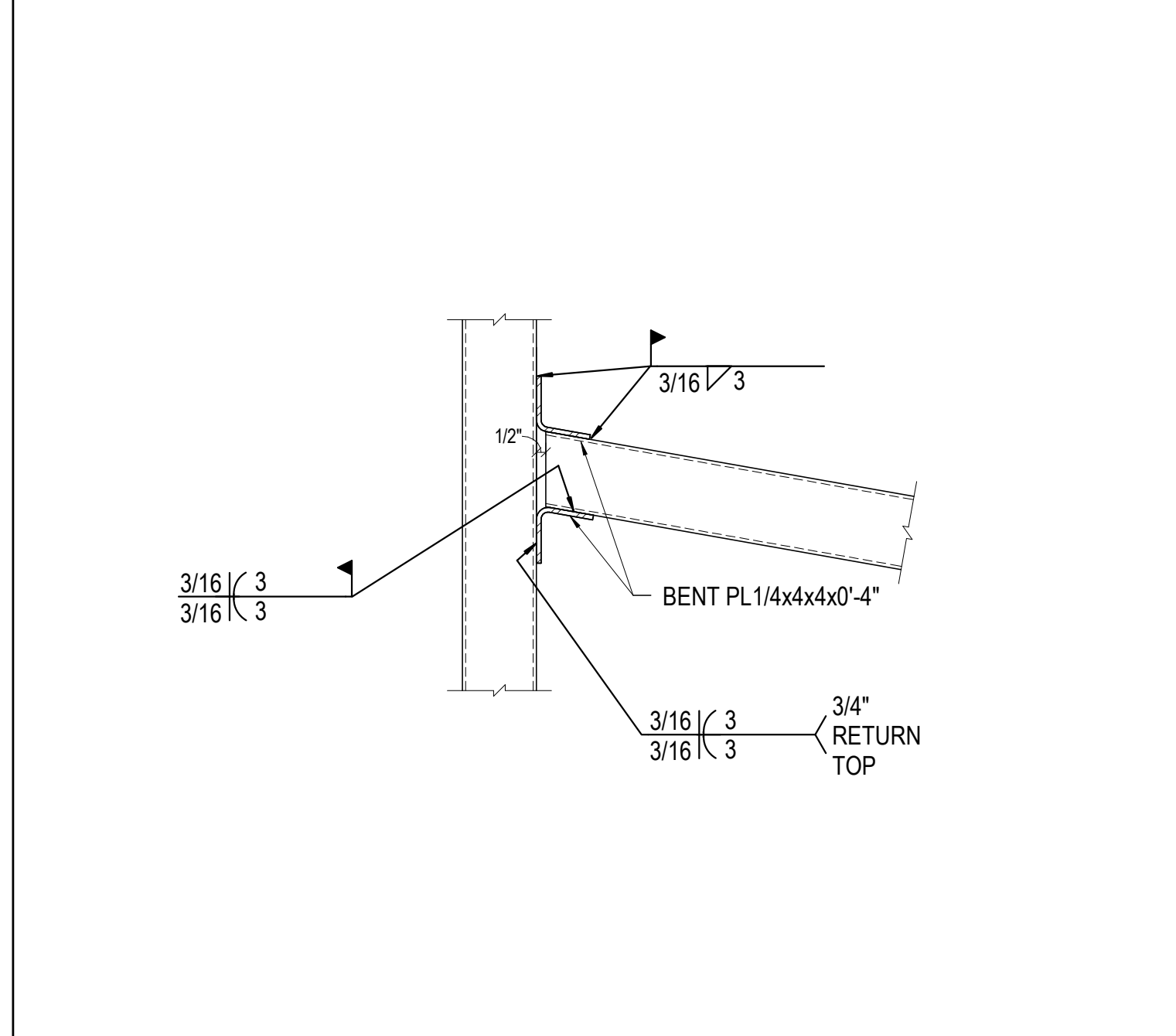
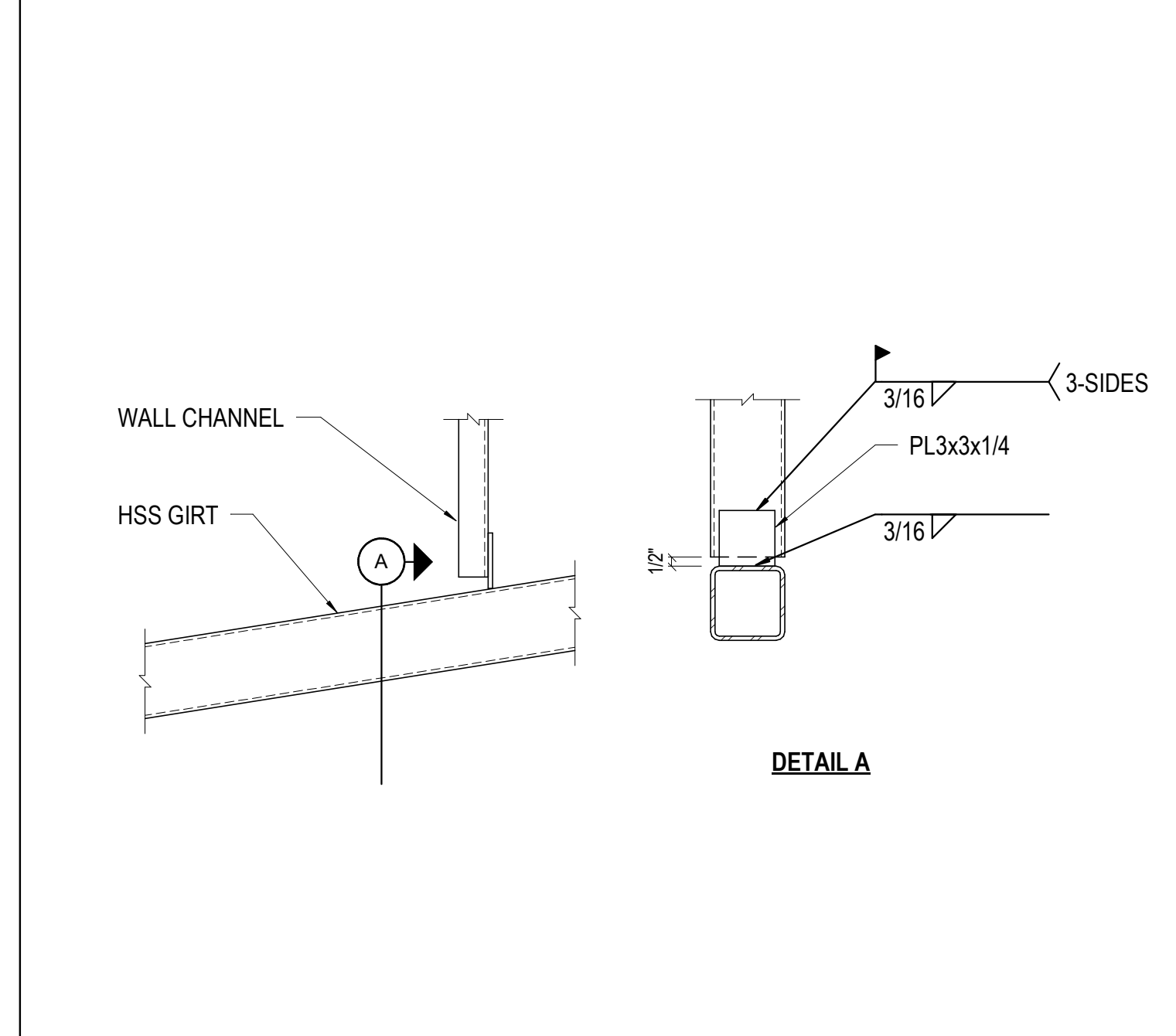


11 WALL CHANNEL BASE CONNECTION  
S-5.7

8 TOP OF COLUMN CONNECTION  
S-5.7

5 CANOPY WALL ELEVATION  
S-5.7

2 CANOPY WALL ELEVATION  
S-5.7



12 WALL CHANNEL TO HSS GIRTS  
S-5.7

9 HSS GIRTS CONNECTION  
S-5.7

6 CANOPY WALL ELEVATION  
S-5.7

# Southern Tenant Farmers Museum

## GRAIN BIN RESTORATION

Tyronza, Arkansas

for

# ARKANSAS STATE UNIVERSITY

DATE OF ISSUE:

MARCH 1, 2024

RE-BID: APRIL 19, 2024

CONTRACTOR NOTE: CHANGES MADE TO THE DRAWINGS ORIGINALLY ISSUED ON MARCH 1, 2024 ARE HIGHLIGHTED IN THIS SET WITH A "CLOUD" AROUND THE CHANGE. THIS INCLUDES ADDENDA PREVIOUSLY ISSUED, NOW INCORPORATED INTO THIS SET FOR RE-BID.



### NOTE REGARDING EXISTING CONDITIONS:

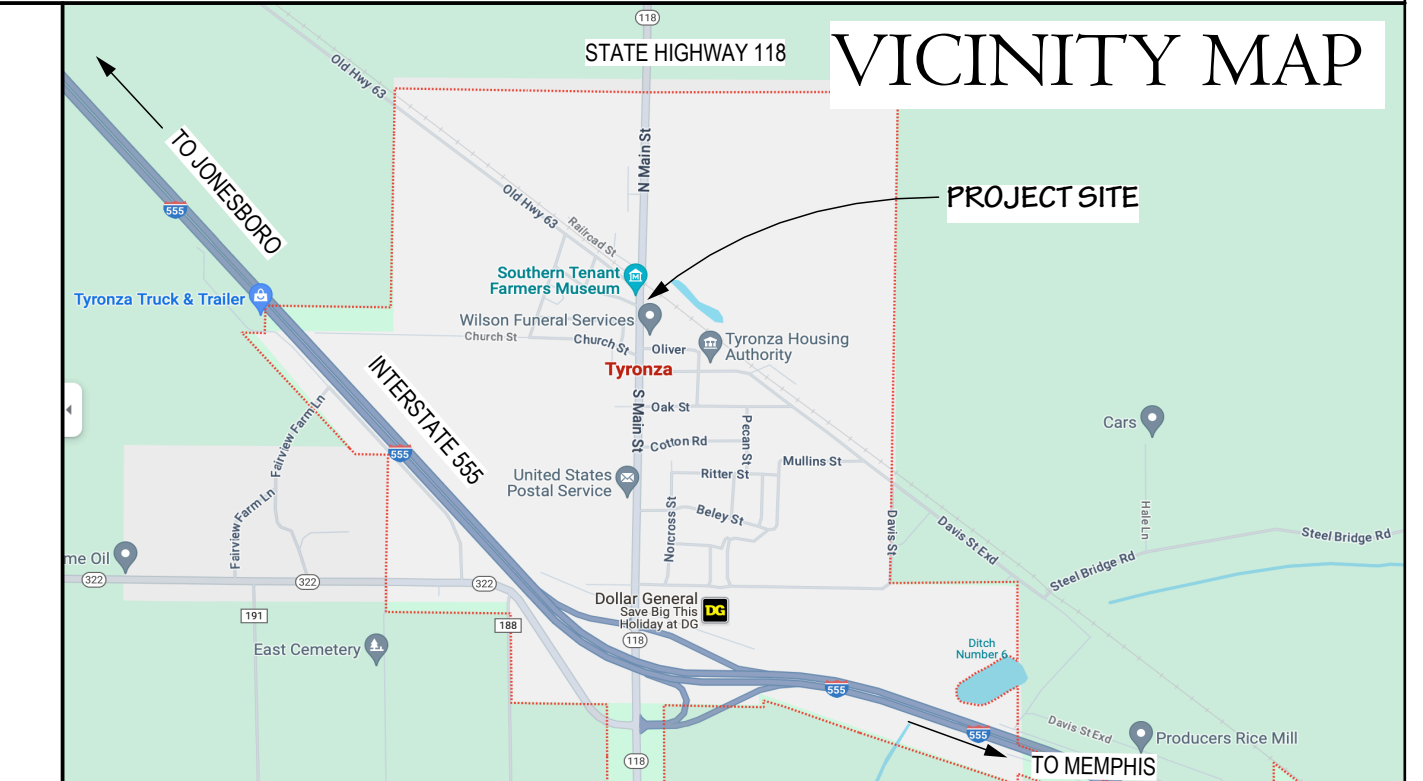
IN ACCORDANCE WITH THE INSTRUCTIONS TO BIDDERS, BIDDERS SHALL VISIT THE BUILDING & THE SITE AND BECOME FAMILIAR WITH LOCAL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND HAS CORRELATED THE BIDDER'S PERSONAL OBSERVATIONS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THIS REQUIREMENT PERTAINS TO BOTH GENERAL CONTRACTORS AND SUBCONTRACTORS ALIKE.

AT THE TIME OF THE BIDDING OF THIS PROJECT, THIS BUILDING WILL BE UNOCCUPIED AND WILL BE MADE AVAILABLE FOR BIDDERS (AND SUB BIDDERS) TO VISIT ANY AND ALL SPACES TO ASSIST IN PREPARING A BID. BIDDERS (AND SUB BIDDERS) ARE ENCOURAGED TO TAKE ADDITIONAL EFFORT IN VISITING ALL SPACES AND LOOKING BEHIND CONCEALED SURFACES SO FAR AS THEY MAY IMPACT THE BIDDERS (AND SUB-BIDDERS) WORK.

NO ALLOWANCE WILL BE GIVEN TO CONTRACTORS FOR "UNFORESEEN CONDITIONS" IF SUCH CONDITIONS COULD BE REASONABLY DISCOVERED AND/OR ANTICIPATED DURING THE BIDDING PHASE AS NECESSARY TO COMPLETE THE WORK DESCRIBED HEREIN.

### DRAWINGS INDEX

T-1	TITLE/ VICINITY MAP/ CODE ANALYSIS/ PARTITION SCHEDULE	S-1.0	STRUCTURAL NOTES AND DESIGN CRITERIA	P-0.1	PLUMBING GENERAL NOTES, SCHEDULE AND LEGEND
---	CIVIL SITE SURVEY	S-1.1	QUALITY ASSURANCE & SPECIAL INSPECTIONS	P-1.1	SCHEDULE AND LEGEND
AS-1.1	ARCHITECTURAL SITE PLAN/ GENERAL NOTES/ DEMOLITION PLAN	S-2.0	FOUNDATION PLAN	P-1.2	PLUMBING PLAN
		S-2.1	ROOF FRAMING PLAN	P-2.1	PLUMBING SITE PLAN
A-0.1	FOUNDATION COORDINATION PLAN	S-3.0	FOUNDATION DETAILS	P-2.2	PLUMBING DETAILS I
A-1.1	FLOOR PLAN, DETAILS, FINISH SCHEDULE	S-3.1	TYPICAL SLAB-ON-GRADE DETAILS	P-2.2	PLUMBING DETAILS II
A-1.2	INTERIOR ELEVATIONS, RESTROOM & MILLWORK DETAILS	S-3.4	COLD FRAMED STEEL WALL DETAILS	P-3.1	PLUMBING RISERS
A-1.3	WINDOW & DOOR SCHEDULE, DETAILS	S-5.5	COLD FRAMED STEEL JOIST & RAFTER DETAILS		
A-2.1	EXTERIOR ELEVATIONS	S-5.6	COLD FRAMED STEEL TYPICAL DETAILS	E-1.1	ELECTRICAL LEGEND & GENERAL NOTES
A-3.1	BUILDING SECTIONS	S-5.7	STEEL ELEVATIONS	E-1.2	LIGHTING PLAN
A-4.1	WALL SECTIONS	M-0.1	MECHANICAL GENERAL NOTES & DRAWING LEGEND	E-1.3	POWER & SYSTEMS PLAN
A-4.2	ROOF SECTIONS	M-1.1	HVAC PLAN	E-1.4	POWER & SYSTEMS PLAN
A-5.1	ROOF PLAN, DETAILS	M-2.1	MECHANICAL DETAILS I	E-1.5	ELECTRICAL SCHEDULES & DETAILS
A-5.2	ROOF DETAILS, DECORATIVE CANOPY DETAILS	M-2.2	MECHANICAL DETAILS II		
A-6.1	REFLECTED CEILING PLAN, DETAILS	M-3.1	MECHANICAL SCHEDULES		



### CODE ANALYSIS

#### APPLICABLE CODES:

2021 ARKANSAS FIRE PREVENTION CODE (BASED ON THE 2021 INTERNATIONAL BUILDING CODE)

2020 ARKANSAS NATIONAL ELECTRIC CODE  
2018 ARKANSAS PLUMBING CODE, 9TH EDITION  
2018 ARKANSAS FUEL GAS CODE  
2021 INTERNATIONAL MECHANICAL CODE

ARKANSAS ENERGY CODE FOR NEW BUILDING CONSTRUCTION SUPPLEMENTS & AMENDMENTS 2014 (REFERENCES ICC 2009 ENERGY CODE).

2017 ICC-ANSI 117.1 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

SUMMARY: THIS PROJECT CONSISTS OF AN APPROX. 1,635 SF. ADDITION TO AN EXISTING, LARGE GRAIN BIN. IN ADDITION, 1,340 SF. OF THE EXISTING 1,845 SF. GRAIN BIN IS BEING CONVERTED TO OCCUPIABLE SPACE BY THE PUBLIC. THUS, RESULTING IN AN APPROX. 2,975 SF BUILDING.

#### 1. OCCUPANCY TYPE- CHAPTER 3:

ASSEMBLY TYPE A-3.

#### 2. TYPE OF CONSTRUCTION- CHAPTER 4 & 6: TYPE IIB, NON-SPRINKLERED

3. AREA & HEIGHT LIMITATIONS: 9,500 SF. (TABLE 506.2) 55' IN HEIGHT (504.3) , TWO STORIES (504.4) MAX. ALLOWABLE.

#### 4. FIRE RESISTANT CONSTRUCTION- CHAPTER 7: TABLE 601- ASSEMBLIES: HOURLY RATING/ NOTES

PRIMARY STRUCTURAL FRAME MEMBERS: NONE  
BEARING WALLS EXTERIOR: NONE  
BEARING WALLS INTERIOR: NONE  
NON BEARING WALLS AND PARTITIONS EXTERIOR: NONE (FIRE SEPARATION > 30')  
NON BEARING WALLS AND PARTITIONS INTERIOR: NONE/ UNLESS OTHERWISE REQ'D BY CODE  
FLOOR CONSTRUCTION & ASSOC. SECONDARY MEMBERS: NONE  
ROOF CONSTRUCTION & ASSOC. SECONDARY MEMBERS: NONE

CORRIDOR FIRE RESISTIVE RATING IBC TABLE 1020.2: A-3, NON-SPRINKLERED, CORRIDOR SERVING GREATER THAN 30 OCCUPANTS: 1-HR RATING REQ'D. OPENINGS IN FIRE PARTITION TO BE 20 MIN. RATED.

#### MEANS OF EGRESS:

2975 SF. TOTAL OF WHICH:  
1340 IS A-3 / 5 NET = 268 OCCUPANTS MAX.  
1635 IS B/ 150 GROSS = 11 PERSONS THUS, 279 PERSONS MAX. LOAD.

*Note: As determined by the Arkansas State Fire Marshal, Dennis Free, if facility is used for an event serving alcohol, the occupant load must be less than 100 persons unless the building is provided with a sprinkler system.*

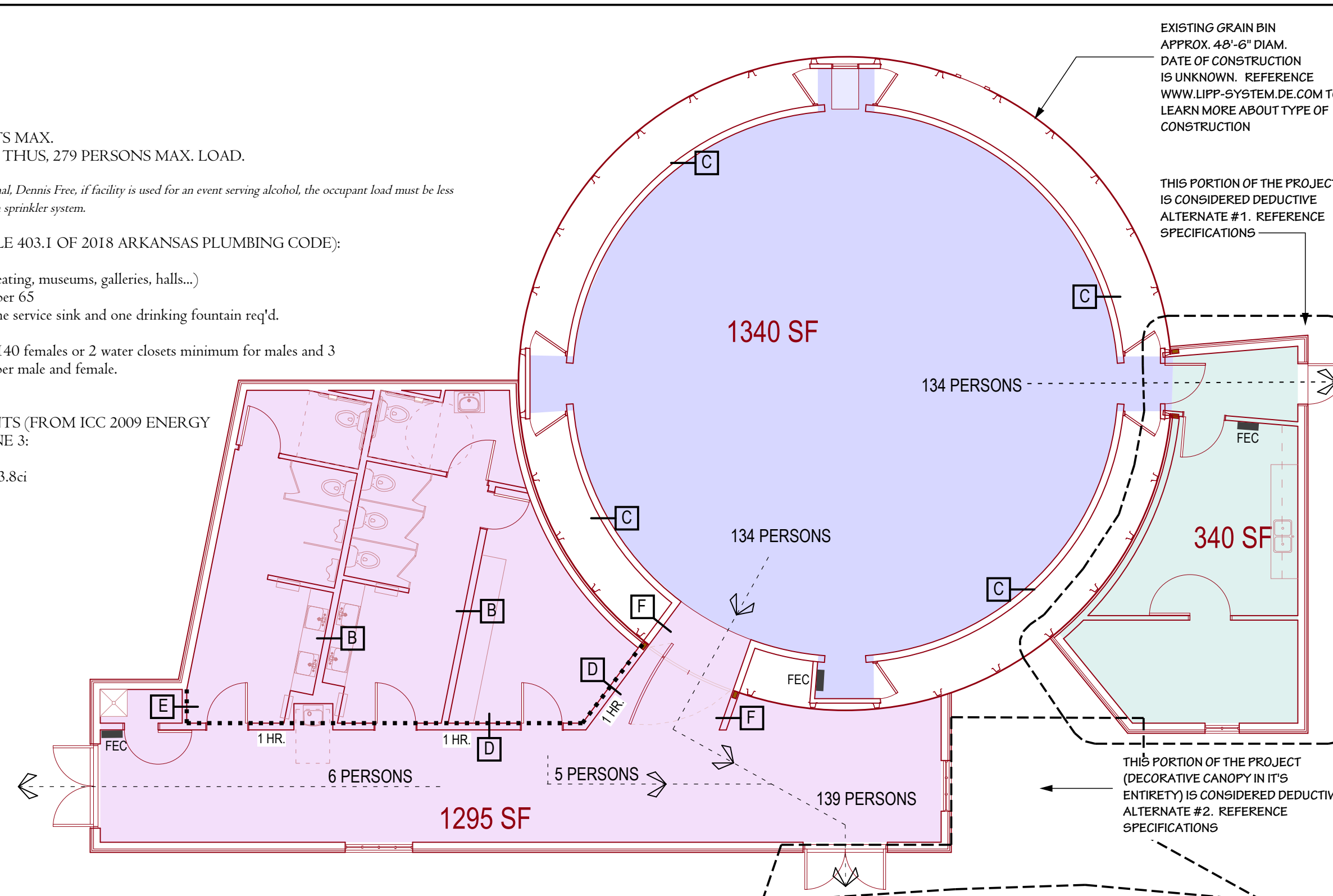
#### BATHROOM FIXTURE COUNT (TABLE 403.1 OF 2018 ARKANSAS PLUMBING CODE):

ASSEMBLY (auditoriums w/o permanent seating, museums, galleries, halls...)  
Water Closets- male: 1 per 125/ females: 1 per 65  
Lavatories- 1 per 200 male and female. One service sink and one drinking fountain req'd.

Thus: 279 occupants/ 2 = 139 males and 140 females or 2 water closets minimum for males and 3 minimum for females. 1 lavatory minimum per male and female.

#### BUILDING ENVELOPE REQUIREMENTS (FROM ICC 2009 ENERGY CODE TABLE 502.2 (1), CLIMATE ZONE 3:

Insulation entirely above roof deck: R-20ci  
Metal framed walls above grade: R-13 + R-3.8ci  
Slab on grade, unheated slabs- NR



## REVIVAL ARCHITECTURE

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AARON C. RUBY, AIA  
REVIVAL ARCHITECTURE, INC.  
ARKANSAS LICENSE # C774

I HEREBY CERTIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED BY ME, OR UNDER MY SUPERVISION. I FURTHER CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THESE PLANS AND SPECIFICATIONS ARE REQUIRED BY LAW AND IN COMPLIANCE WITH THE ARKANSAS FIRE PREVENTION CODE.

### PARTITION SCHEDULE

GENERAL NOTES:

- UNLESS NOTED OTHERWISE, ALL PARTITIONS IN THE PROJECT ARE TYPE "A".
- PROVIDE 3 1/2" SOUND BATT INSULATION FOR ALL PARTITIONS SURROUNDING RESTROOMS.
- USE MOISTURE RESISTANT GYP. BD. ON WET WALLS IN RESTROOMS.
- CONTRACTOR SHALL PROVIDE TREATED 2X WOOD BLOCKING IN ALL INTERIOR AND EXTERIOR WALLS RECEIVING GRAB BARS OR CABINETS.

LEGEND

- 1 HR. RATED PARTITION
- 2 HR. RATED PARTITION
- PARTITION KEY- REFER TO PARTITION SCHEDULE
- PATH OF EGRESS
- FEC FIRE EXTINGUISHER CABINET AS SPECIFIED
- VERIFY LOCATION OF ALL CABINETS WITH ARCHITECT & FIRE MARSHAL PRIOR TO INSTALL

TYPE "A" (NON-RATED, NON-LOAD BEARING)  
3 5/8" 20 GA. MTL. STUDS @ 16" O.C. WITH ONE LAYER OF 5/8" GYP. BD. EACH SIDE. STUDS TO DECK, GYP. BD. TO 6" ABOVE ADJACENT CEILING.

TYPE "B" (NON-RATED, NON-LOAD BEARING)  
6" GA. MTL. STUDS @ 16" O.C. WITH ONE LAYER OF 5/8" GYP. BD. EACH SIDE. ENTIRE ASSEMBLY TO DECK.

TYPE "C" (NON-RATED, LOAD-BEARING)  
6" GA. MTL. STUDS FOR TALL WALLS IN NEW BIN.

TYPE "D" (1-HR-RATED, LOAD-BEARING)  
6" GA. MTL. STUDS AT EAST WALL OF GALLERY 100A. CONSTRUCT IN ACCORD. WITH UL # \_\_\_\_\_

TYPE "E" (1-HR-RATED, NON-LOAD BEARING)  
3 5/8" 20 GA. MTL. STUDS @ 16" O.C. WITH ONE LAYER OF 5/8" GYP. BD. EACH SIDE. STUDS TO DECK, GYP. BD. TO 6" ABOVE ADJACENT CEILING. CONSTRUCT IN ACCORD. WITH UL # \_\_\_\_\_

TYPE "F" (NON-RATED, NON-LOAD BEARING)  
6" GA. MTL. STUDS